THE INVISIBLE WHEEL OF DEATH by Don Wilcox

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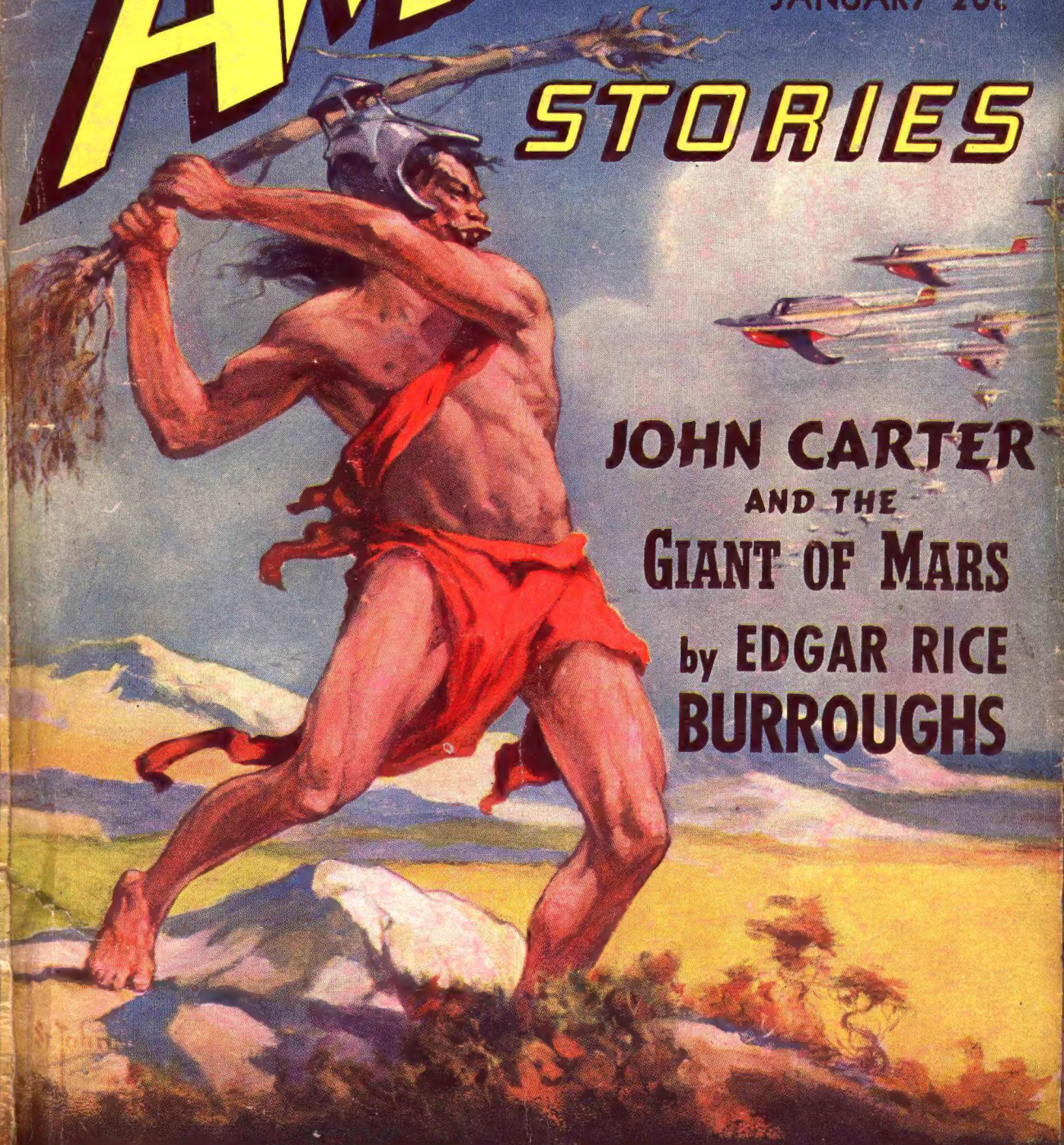
AMAZING STORIES

JANUARY 20¢



JOHN CARTER AND THE GIANT OF MARS by EDGAR RICE BURROUGHS

HAMILTON ★ CABOT ★ O'BRIEN ★ HARRIS

VOLUME 15 NUMBER 1

AMAZING STORIES

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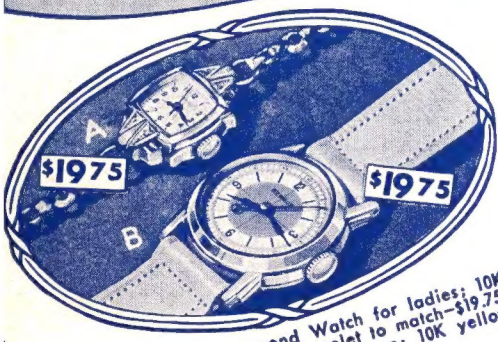

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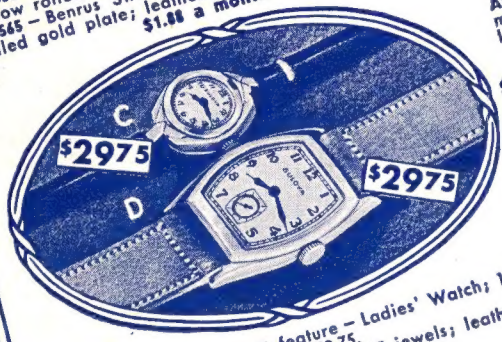

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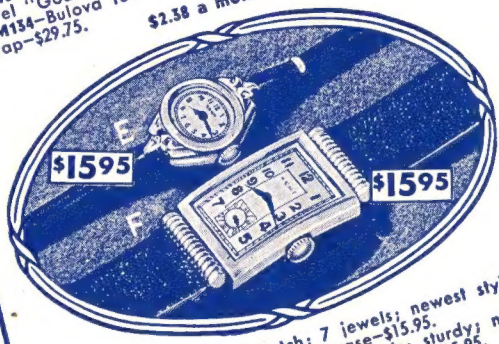

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JANUARY
1941

AMAZING STORIES

TRADE MARK REGISTERED

VOLUME 15
NUMBER 1

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ront cover painting by J. Allen St. John depicting a scene in **John Carter And The Giant of Mars**
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Volume XV
Number 1

DO WE HAVE TO DIE?

A strange man in Los Angeles, known as "The Voice of Two Worlds," reveals the story of a remarkable system that often leads to almost unbelievable improvement in power of mind, achievement of brilliant business and professional success and new happiness. Many report improvement in health. Others tell of increased bodily strength, magnetic personality, courage and poise.

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The author states the time has come for this long hidden system to be disclosed to the Western world, and offers to send his amazing 9000-word treatise—which reveals many startling results—to sincere readers of this publication, free of cost or obligation. For your free copy, address the Institute of Mentalphysics, 213 So. Hobart Blvd., Dept. 113M, Los Angeles, Calif. Readers are urged to write promptly, as only a limited number of the free treatises have been printed.

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THIS is it, gentle readers; the issue you've no doubt been waiting for. Because here he is again, after long years of absence—John Carter of Virginia, the most famous Earthman of all science fiction, the one and only Warlord of Mars. What a fighter he is!—this two-fisted, sword-swinging Prince of Helium, greatest nation on all Barsoom.

And with him come all the old, beloved characters you've come to know and love. Dejah Thoris, the incomparable; Tars Tarkas, that savage, yet tender Jeddak of the Tharks; Tardos Mors, Jeddak of Jeddaks; Kantos Kan, Admiral of the Fleet, in addition to the new characters, Joog, the giant, and Pew Mogel, most horrible creation of Ras Thavas, master of synthesis.

Now you can shudder once more at the roar of the banth, great many-legged lion of Mars; chill to the scream of the great white apes; ride again on the giant thoats across the dead sea bottoms of an ancient world; prowl through the ghostly ruins of dead cities beneath the two hurtling Barsoomian moons; struggle across the great Toonalian Marshes; fight side by side with the brave red warriors of Helium; hurtle through the thin air of Mars on the airships of the Barsoomian ray. Yes, it's going to be a real treat, and we take great pride in bringing back to you these incomparable thrills.

NATURALLY, we wouldn't think of bringing John Carter back without also presenting artist J. Allen St. John's artistic conceptions of our old friend. You'll notice that the cover painting, depicting Joog, the giant, and the interior illustrations also, are in keeping with your old memories. Mr. St. John has enthusiastically consented to illustrate all the Burroughs stories we plan to run in the coming months. If you are in accord with this, we think he'd like to hear from you, since he has expressed the desire to give the readers of AMAZING STORIES exactly what they want from him.

WHILE we are on the subject of Burroughs, we might mention that AMAZING STORIES' sister magazine, *Fantastic Adventures*, will feature the return of Carson of Venus in the March issue, on sale January 20th. Here's another great character returning for your enjoyment.

SINCE we began our series of *Scientific Mysteries*, we've been quite amazed ourselves at the mysteries that do exist on this prosaic old Earth of ours. Especially the mystery we present this month, concerning the ancient pyramid of Gizeh. We suggest you read this article carefully for some really amazing revelations.

LEO MOREY returns next month with the finest cover he has ever painted. It is featured by Don Wilcox's finest interplanetary story, and we guarantee this will be a banner issue for dyed-in-the-wool space story fans.

REMEMBER when we said David Wright O'Brien was a writer to watch? Well, your editor believes that a writer who can turn out really good science fiction stories under 3,000 words, has something on the ball. We've tried for years to get really short stories, and when we asked O'Brien if he thought he could turn out a few, he said: "Why not?"

And why not indeed? We present the first one in this issue, and we think you'll like it. In fact, we're rather proud of all our short stories this month. They all have that quality called "sock." Let's have your opinion.

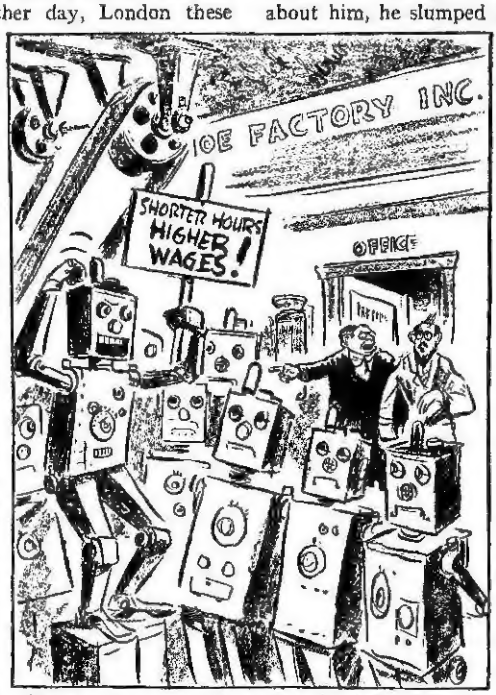
AMAZING news—to your editor, if not to you. The official AMAZING STORIES bowling team still retains a tight hold on first place after a month of bowling. Maybe we'll have to put out a special issue for that Milwaukee bunch. They not only write for us, read us; but they boost us by producing a winning team. How do you do it, boys? I hope you aren't using any fourth dimensional pin spillers!

ADOLPH SCHICKELGRUBER doesn't seem to be doing so well over there, now that we have had no super tanks or other war weapons on our back covers for him to copy and use to smash down Little Maginot Lines. However, we are joining in with national defense by sending all our ideas over to Britain for first line work.

YOUR editor recently has been hearing a sombre dirge ringing in his ears, and he's inclined to scoff a bit at it. The cry has been, "You're going to lose an author, I fear!"

It's been the authors themselves who have been singing that song in our office. And maybe it is a serious matter. It would be bad to lose a half-dozen ace authors. But consider the fact that Festus Pragnell, Thornton Ayre, Polton Cross, William F. Temple, John Beynon, and others are still grinding out fiction at a great rate. This with bombs dropping on them nightly. I wonder how they do it. Festus Pragnell has written three stories in the last two months, a total production of 43,000 words, under fire.

ACCORDING to Mr. Pragnell, whose letter we just received the other day, London these days is an amazing story in itself. Especially at night, when an air raid is in progress, the spectacle is almost unbelievable. Your editor can well believe that, and picturing the same thing happening to Chicago, or New York, he shudders and squares his shoulders definitely in favor of armament, more armament, and still more armament, and preparedness at all costs.



"I warned you against using those Russian replacement parts. Now look what's happened!"

THINKING of bomb shelters, we are reminded of a rather beside-the-point fact, but it's amazing, so here it is. If you were to dig a hole into this old earth of ours, you'd find that with every sixty-four feet you'd dig, the temperature would increase one degree Fahrenheit, and almost all substances that we know of would melt at the terrific heat that rages thirty miles down. And yet, the earth is not molten at that depth because of the great pressure exerted on the intensely hot material, or magma.

JUST to get out of that deep hole we've dug, let's consider meteorites. Today we value them because they give us the only clue we have to the universe beyond us. But, to the natives of Netherlands East Indies this rare metal is used as a war material!

These people use meteoric iron for the manufacture of a weapon known as a *kris*, a peculiar sort of dagger. The rare iron from the skies is used together with terrestrial iron, and appears to have served the purpose of not only making a stronger blade, but also of adding certain symbolic and decorative qualities. Naturally, not all krises contain meteoric iron, for the metal is rare indeed.

NOW for a short-short amazing story. Let's try to dramatize it:

An aged, wrinkled, white-haired Chinaman stood before a maze of retorts and beakers and flasks. In his hand he held a cup containing a golden-colored liquid. He drew in his breath sharply. Then, resolve apparent on his old features, he lifted the cup to his dry lips and gulped down the liquid.

His face instantly became a mask of disgust and anguish. Then it returned to its usual stoic calmness. Pulling his long, heavy, black robe about him, he slumped into a chair to wait.

But alas, although he waited long, he grew no lighter. Gravity still dragged at his body with its accustomed force. T'ao Hung-king had failed. He could not fly!

That's the story, readers, but here's the story behind it. It seems even in 452 A.D., when this scene took place, science was making experiments in an attempt to overcome gravity, to fly like a bird. For T'ao Hung-king, the physician, had concocted an elixir composed of mixed gold, cinnabar, azurite, and sulphur, which he fondly hoped would make him light enough to take off and fly like a bird!

AMONG man's early methods of learning to conquer the air was the starvation method. The idea of starving to fly was developed by the Taoists of China, and is partially traceable to early India. "Live on air to conquer air" was the slogan of this school of thought!

Which isn't such an odd slogan at that. Your editor has been trying to live on air for a long while, only to find money *does* fly!

THE earliest dirigible was conceived by the ancient Babylonians, Persians, and Greeks who had the first air mail system of carrier pigeons. The first dirigible airship consisted of a basket harnessed to a flock of birds which were supposed to draw the strange vehicle through the air. No performance figures are available as to the result! *(Continued on page 42)*

JOHN CARTER

and the GIANT of MARS

At Pew Mogel's command, the great white ape grasped the lovely Dejah Thoris to him

by Edgar Rice Burroughs

In all Barsoom no man could stand against John Carter of Virginia—except Joog, the synthetic giant!

THE moons of Mars looked down upon a giant Martian thoat as it raced silently over the soft, mossy ground. Eight powerful legs carried the creature forward in great, leaping strides.

The path of the mighty beast was guided telepathically by the two people who sat in a huge saddle that was cinched to the thoat's broad back.

It was the custom of Dejah Thoris, Princess of Helium, to ride forth weekly to inspect part of her grandfather's vast farming and industrial kingdom.

Her journey to the farm lands wound through the lonely Helium Forest where grow the huge trees that furnish much of the lumber supply to the civilized nations of Mars.

Dawn was just breaking in the eastern Martian sky, and the jungle was dark and still damp with the evening dew. The gloom of the forest made Dejah Thoris thankful for the presence of her companion.

who rode in the saddle in front of her. Her hands rested on his broad, bronze shoulders, and the feel of those smooth, supple muscles gave her a little thrill of confidence. One of his hands rested on the jewel-encrusted hilt of his great long sword; and he sat his saddle very straight, for he was the mightiest warrior on Mars.

John Carter turned to gaze at the lovely face of his princess.

"Frightened, Dejah Thoris?" he asked.

"Never, when I am with my chieftain," Dejah Thoris smiled.

"But what of the forest monsters, the arboks?"

"Grandfather has had them all removed. On the last trip, my guard killed the only tree reptile I've ever seen."

Suddenly Dejah Thoris gasped, clutched vainly at John Carter to regain her balance. The mighty thoat lurched heavily to the mossy ground. The riders catapulted over his head. In an instant the two had regained their feet; but the thoat lay very still.

Carter jerked his long sword from its scabbard and motioned Dejah Thoris to stay at his back.

The silence of the forest was abruptly shattered by an uncanny roar directly above them.

"An arbok!" Dejah Thoris cried.

The tree reptile launched itself straight for the hated manthings. Carter lifted his sword and swung quickly to one side, drawing the monster's attention away from Dejah Thoris who crouched behind the fallen thoat.

The earthman's first thrust sliced harmlessly through the beast's outer skin. A huge claw knocked him off balance, and he found himself lying on the ground with the great fangs at his throat.

"Dejah Thoris, get the atom gun from the thoat's back," Carter called hoarsely to the girl. There was no answer.

Calling upon every ounce of his great strength, Carter drove his sword into the arbok's neck. The creature shuddered. A stream of blood gushed from the wound. The man wriggled from under the dead body and sprang to his feet.

"Dejah Thoris! Dejah Thoris!"

Wildly Carter searched the ground and trees surrounding the dead thoat and arbok. There was no sign of Dejah Thoris. She had utterly vanished.

A SHAFT of light from the rising sun filtering through the foliage glistened on an object at the earthman's feet. Carter picked up a large shell, a shell recently ejected from a silent atom gun.

Springing to the dead thoat, he examined the saddle trappings. The atom gun that he had told Dejah Thoris to fire was still in its leather boot!

The earthman stooped beside the dead thoat's head. There was a tiny, bloody hole through its skull. That shot and the charging arbok had been part of a well conceived plan to abduct Dejah Thoris, and kill him!

But Dejah Thoris—how had she disappeared so quickly, so completely?

Grimly, Carter set off at a run back to the forest toward Helium.

NOON found the earthman in a private audience chamber of Tardos Mors, Jeddak of Helium, grandfather of Dejah Thoris.

The old jeddak was worried. He thrust a rough piece of parchment into John Carter's hand. Crude, bold letters were inscribed upon the parchment; and as Carter scanned the note his eyes burned with anger: It read:

"I, Pew Mogel, the most powerful

ruler on Mars, have decided to take over the iron works of Helium. The iron will furnish me with all the ships I need to protect Helium and the other cities of Barsoom from invasion. If you have not evacuated all your workers from the iron mines and factories in three days, then I will start sending you the fingers of the Royal Princess of Helium. Hurry, because I may decide to send her tongue, which wags too much of John Carter. Remember, obey Pew Mogel, for he is all-powerful."

Tardos Mors dug his nails into the palms of his hands.

"Who is this upstart who calls himself the most powerful ruler of Mars?"

Carter looked thoughtfully at the note.

"He must have spies here," he said. "Pew Mogel knew that I was to leave this morning with Dejah Thoris on a tour of inspection."

"A spy it must have been," Tardos Mors groaned. "I found this note pinned to the curtains in my private audience-chamber. "But what can we do? Dejah Thoris is the only thing in life that I have left to love—" His voice broke.

"All Helium loves her, Tardos Mors, and we will all die before we return to you empty-handed."

Carter strode to the visiscreen and pushed a button.

"Summon Kantos Kan and Tars Tarkas." He spoke quickly to an orderly. "Have them come here at once."

Soon after, the huge, green warrior and the lean, red man were in the audience-chamber.

"It is fortunate, John Carter, that I am here in Helium on my weekly visit from the plains." Tars Tarkas, the green thark, gripped his massive sword with his powerful four hands. His great, giant body loomed majestically above the others in the room.

Kantos Kan laid his hand on John Carter's shoulder.

"I was on my way to the palace when I received your summons. Already, word of our princess' abduction has spread over Helium. I came immediately," said the noble fellow, "to offer you my sword and my heart."

"I have never heard of this Pew Mogel," said Tars Tarkas. "Is he a green man?"

Tardos Mors grunted, "He's probably some petty outlaw or criminal who as an overbloated ego."

Carter raised his eyes from the ransom note.

"No, Tardos Mors, I think he is more formidable than you imagine. He is clever, also. There must have been an airship, with a silent motor, at hand to carry Dejah Thoris away so quickly—or perhaps some great bird! Only a very powerful man who is prepared to back up his threats would kidnap the Princess of Helium and even hope to take over the great iron works.

"He probably has great resources at his command. It is doubtful, however, if he has any intention of returning the princess or he would have included more details in his ransom note."

Suddenly the earthman's keen eyes narrowed. A shadow had moved in the adjoining room.

WITH a powerful leap, Carter reached the arched doorway. A furtive figure melted away into the semi-gloom of the passageway, with Carter close behind.

Seeing escape impossible, the stranger halted, sank to one knee and leveled a ray-gun at the approaching figure of the earthman. Carter saw his finger whiten as he squeezed the trigger.

"Carter!" Kantos Kan shouted, "throw yourself to the floor."

With the speed of light, Carter

dropped prone. A long blade whizzed over his head and buried itself to the hilt in the heart of the stranger.

"One of Pew Mogel's spies," John Carter muttered as he rose to his feet. "Thank you, Kantos Kan."

Kantos Kan searched the body but found no clue to the man's identity.

Back in the audience-chamber, the men set to work with fierce resolve.

They were bending over a huge map of Barsoom when Carter spoke.

"Cities for miles around Helium are now all friendly. They would have warned us of this Pew Mogel if they had known of him. He has probably taken over one of the deserted cities in the dead sea bottom east or west of Helium. It means thousands of miles to search; but we will go over each mile."

Carter seated himself at a table and explained his plan.

"Tars Tarkas, go east and contact the chiefs of all your tribes. I'll cover the west with air scouts. Kantos Kan will stay in Helium as contact man. Be ready night and day with the entire Helium air force. Whoever discovers Dejah Thoris first will notify Kantos Kan of his position. Naturally, we can only communicate to each other through Kantos Kan. The wave length will be constant and secret, 2000 kilocycles."

Tardos Mors turned to the earthman.

"Every resource in my kingdom is at your command, John Carter."

"We leave at once, your majesty; and if Dejah Thoris is alive on Barsoom, we shall find her," replied John Carter.

CHAPTER II

The Search

WITHIN three hours, John Carter was standing on the roof of the Royal Airdrome giving last-minute instructions to a fleet of twenty-four fast, one-man scouts.

"Cover all the territory in your district thoroughly. If you discover anything, don't attempt to handle it by yourself. Notify Kantos Kan immediately." Carter surveyed the grim faces before him and knew that they would obey him.

"Let's go." Carter jerked a thumb over his shoulder to the ships.

The men scattered and soon their planes were speeding away from Helium.

Carter stayed on the roof long enough to check with Kantos Kan. He adjusted the earphones around his head and then signalled on 2000 kilocycles. The dots and dashes of Kantos Kan's reply began coming in immediately.

"Your signal comes in perfectly. Tars Tarkas is just leaving the city. The air fleet is mobilizing. The entire air force will stand by to come to your aid. Kantos Kan signing off."

Night found Carter cruising about five hundred miles from Helium. He was very tired. The search of several ruined cities and canals had been fruitless. The buzzing of the microset aroused him again.

"Kantos Kan reporting. Tars Tarkas has organized a complete ground search east to south; other air scouts west to south report nothing. Will acquaint you with any news that might come in. Await orders. Will stand by. Signing off."

"No orders. No news. Carter signing off."

Wearily he let the ship drift. No need to look further until the moons came up. The earthman fell into a fitful sleep.

It was midnight when the speaker sounded, jerking Carter to wakefulness. Kantos Kan was signalling again, excitedly.

"Tars Tarkas has found Dejah Thoris. She is held in a deserted city on the banks of the dead sea of Korvas." Kantos Kan gave the exact latitude and longitude of the spot.

"Further instructions from Tars Tarkas request the greatest secrecy in your movements. He will be at the main bridge leading into the City. Kantos Kan signing off. Come in, John Carter."

John Carter signed off with Kantos Kan, urging him to stand by constantly to be ready with the Helium Air Fleet. Now he set his gyro-compass, a device that would automatically steer him to his destination.

SEVERAL hours later, the earthman flew over a low range of hills and saw below him an ancient city on the banks of the Dead Sea. He circled his plane and dropped to the bridge where he had been instructed to meet Tars Tarkas. Long, black shadows filled a dry gulley below him.

Carter climbed out of his plane, keeping to the shadows, and made his way to the towering ruins of the city. It was so quiet that a lonely bat swooping from a tower sounded like a falling airship.

Where was Tars Tarkas? The green man should have appeared at the bridge.

At the entrance to the city, Carter stepped into the black shadow of a wall and waited. No sound broke the stillness of the quiet night. The city was like a tomb. Diemos and Phobos, the two fast-moving moons of Mars, whirled across the heavens.

Carter stopped breathing to listen. To his keen ears came the faint sound of steps—strange, shuffling steps dragging closer.

Something was coming along the wall. The earthman tensed, ready to spring away to his ship. Now he could hear other steps all around him. Inside the ruins something dragged against the fallen rocks.

Then a great, heavy body dropped on John Carter from the wall above. Hot, fetid breath burned his neck. Huge, shaggy arms smothered him in their fierce embrace.

The thing hurled him to the rough cobblestones. Huge hands clutched at his throat. Carter turned his head and saw above him the face of a great, white ape.

Three of the creature's fellows were circling around Carter, striving to tie his feet with a piece of rope while the other choked him into insensibility with his four mighty hands.

Carter wriggled his feet under the belly of the ape with whom he was grappling. One mighty heave sent the creature into the air to fall, groaning and helpless, to the ground.

Like a cornered banth,* Carter was on his feet, crouched against the wall, awaiting the attacking trio, with drawn sword.

They were mighty beasts, fully eight feet tall with long, white hair covering their great bodies. Each was equipped with four muscular arms that ended in tremendous hands armed with sharp, hooked claws. They were baring their fangs and growling viciously as they came toward the earthman.

Carter crouched low; and as the beasts sprang in, his earthly muscles sent him leaping high into the air over their heads. The earthman's heavy blade, backed by all the power of his muscles, smacked down upon one ape's head, splitting the skull wide open.

Carter hit the ground and, turning, was ready when the two apes remaining flew at him again. There was a hideous,

*A banth is the huge, eight-legged lion of Mars.—Ed.

hair-raising shriek as this time the earthman's sword sank deep into a savage heart.

As the monster sprawled to the ground, the earthman jerked free his sword.

Now the other beast turned and slunk away in fright, his eyes gleaming at Carter in the darkness as it fled down a long corridor in the adjacent building. The earthman could have sworn that he heard his own name coming from the ape's throat and mingling with its sullen growl as it fled away.

The earthman had just seized his sword when he felt a rush of air above his head. There was a blur of motion as something came down toward him.

Now he felt himself clutched about the waist; then he was jerked fifty feet into the air. Struggling for breath, Carter clutched at the thing encircling his body. It was as horny as the skin of an arbok. It had hairs as large as tree roots bristling from the horny scales.

It was a giant hand!

CHAPTER III

Joog, the Giant

JOHN CARTER found himself looking into a monstrous face.

From top of shaggy head to bottom of its hairy chin, the head measured fully fifteen feet.

A new monstrosity had come to life on Mars. Judging by the adjacent buildings, the creature must have been a hundred and thirty feet tall!

The giant raised Carter high over his head and shook him; then he threw back his face. Hideous, hollow laughter rumbled out of his pendulous lips revealing teeth like small mountain crags.

He was dressed in an illy-fitting, baggy tunic that came down in loose folds over his hips but which allowed his arms and legs to be free.

With his other hand he beat his mighty chest.

"I, Joog. I, Joog," he kept repeating as he continued to laugh and shake his helpless victim. "I can kill! I can kill!"

Joog, the giant, commenced to walk. Carefully he stepped along the barren streets, sometimes going around a building that was too high to step over.

Finally he stopped before a partially ruined palace. The ravages of time had only dimmed its beauty. Huge masses of moss and vines trailed through the masonry, hiding the shattered battlements. With a sudden thrust, Joog, the giant, shoved John Carter through a high window in the palace tower.

When Carter felt the giant's hold releasing upon him he relaxed completely. He hit the stone floor in a long roll, protecting his head with his arms. As he lay in the deep darkness of the place where he had fallen, the earthman listened while he regained his breath.

No sound came to his ears for some time; then he began to hear the heavy breathing of Joog outside his window. Once more Carter's earthly muscles, reacting to the lesser gravity of Mars, sent him leaping twenty feet to the sill of the narrow window. Here he clung and looked once again into the hairy, hideous face of the giant.

"I, Joog. I, Joog," he mumbled. "I can kill! I can kill!" The giant's breath swept over Carter like a blast from a sulphur furnace. There would be no escape from that window!

Once more he dropped down into his cell. This time he commenced a slow circuit of the room, groping his way along the polished ersite slabs that formed the wall. The cobblestone floor was thick with debris. Once, Carter heard the sinister hiss of a Martian

spider as he brushed its web.

How long he groped his way around the walls, there was no way of knowing. It seemed hours. Then, suddenly, the deathly silence was shattered by a woman's scream coming from somewhere in the building.

John Carter could feel his skin grow cold. Could that have been the voice of Dejah Thoris?

ONCE again John Carter leaped toward the faint light that marked the window ledge. Cautiously, he looked down. Joog lay on his back on the flagstones below, breathing as though he were asleep, his great chest rising five feet with every breath.

Quietly he started to edge his way along a ledge that ran from the window and disappeared into the shadow of an adjoining tower. If he could make that shadow without awakening Joog!

He had almost gained his objective when Joog growled hoarsely.

He had opened one great eye. Now he reached up and, grabbing Carter by the leg, hurled him into the tower window again.

Wearily, the earthman crawled to the wall of his dark cell and there slumped down against it. That scream haunted his memory. He was tormented by the thought that Dejah Thoris might be in danger.

And where was Tars Tarkas? Pew Mogel must have captured him, too. Carter suddenly sprang to his feet.

One of the ersite slabs at his back had moved! He waited. Nothing came out. Cautiously, he approached the rock and shoved it with his foot. The slab moved slightly inward. Now Carter shoved the stone with all his tremendous strength. Inch by inch he moved it until finally there was enough room for him to squeeze his body through.

He was still in utter darkness, but his groping fingers revealed to him that he was in a corridor between two walls. Perhaps this was the way out of his prison!

Carefully he shoved the stone back into position, leaving no trace of his disappearance from the room. The corridor in which he found himself was so low that he was forced to crawl on hands and knees. The low corridor had the stench of age, as if it had been unused for a long time.

Gradually the tunnel sloped more and more downward. Many little side-passages branched off from the main tunnel. There was no light, no noise. Only a faint, pungent odor beginning to fill the air.

Now it was growing lighter. The earthman realized that he must be in the subterranean caverns of the palace. The dim light was caused by the phosphorescent radium glow that is used on all Mars for radiation.

The source of this faint light the earthman suddenly discovered. It was shining through a cleft in the wall ahead. Pushing aside another loose stone, John Carter crawled forth into a chamber. He drew in his breath sharply.

Facing him was a warrior with drawn sword, the point of which was almost touching the breast of the earthman!

JOHN CARTER leaped back with the speed of lightning, whipped out his own sword and struck at the other's weapon.

The arm of the red man fell from his body to the floor where it dissolved into dust. The ancient sword clattered on the cobblestones.

Carter could see now that the warrior had been leaning against the wall, balanced there precariously for ages, his sword arm extending in front of him just as it had stiffened long ago in death.

The loss of the arm overbalanced the torso which toppled to the floor and there dissolved into a heap of ash-like dust!

In an adjoining chamber there were a score of women, beautiful girls, chained together by collars of gold around their necks. They sat at a table where they had been eating, and the food was still before them. They had been the prisoners, the slaves of the rulers of the long-dead city. The dry, motionless air combined with some gaseous secretion from the walls and dungeons had preserved their beauty through the ages.

The earthman had traversed some little distance down a musty corridor when he became aware of something scraping behind him. Whirling into a side corridor he looked back. Gleaming eyes were coming toward him. They followed him as he backed into the tunnel.

Now again came the scraping, repeated this time farther ahead in the tunnel. Other eyes shone ahead of him.

John Carter ran forward, his sword-point extended. The eyes ahead retreated, but those in back of him started to close in.

It was very dark now, but far ahead the earthman could see a faint gleam of light filtering into the tunnel.

He ran toward the light. Fighting the things where he could see them would be a lot easier than stumbling around in a dark corridor.

Carter entered the room and in the dim light came face to face with the creature whose eyes he had seen ahead of him in the tunnel. It was a species of the huge three-legged Martian rat!

Its yellow fangs were bared hideously in a vicious snarl, as it backed slowly away from Carter to the far end of the small room.

Now behind him came the other rat, and together the two beasts started to close in upon the earthman.

Carter smiled grimly as he gripped his sword.

"I am the proverbial cornered rat now," he muttered as he swung his blade at the nearest creature.

It ducked the blow and scurried toward him.

But the earthman's sword was ready. The charging rat lunged full upon the waiting sword-point.

The momentum of the beast carried Carter back five feet; but he still retained a hold on his sword, the point of which had plunged through the animal's single shoulder and pierced its wild heart.

When Carter had jerked free his sword and turned to meet his other antagonist an exclamation of dismay escaped his lips.

The room was half filled with rats!

The creatures had entered through another opening and had formed a circle around him, waiting to attack.

For half an hour, Carter battled furiously for his life in the lonely dungeon beneath the palace in the ancient city of Korvas.

The carcasses of the dead rats were piled high around him, but still they came and eventually they overpowered him by their very numbers.

John Carter went down by a terrific blow to his head from a snake-like tail.

He was half stunned, but he still clung tenaciously to his sword as he felt himself seized by the arms and dragged away into the darkness of an adjoining tunnel.

CHAPTER IV

The City of Rats

JOHN CARTER recovered fully when he was dragged through a pool of muddy water. He heard the

rats greedily drinking, saw their green eyes gleaming in the darkness. The smell of freshly dug earth reached his nostrils and he realized that he was in a burrow far under the subterranean vaults of the palace.

Several rats on either side of him had hold of his arms by their forepaws as they dragged him along. It was very uncomfortable, and he wondered how much longer the journey would last.

Nor had he long to wait. The strange company finally came out into a huge underground cavern. Light from the outside filtered down through various openings in the ceiling above, its rays reflecting on thousands of gleaming stalactites of red sand stone. Massive stalagmites, huge sedimentary formations of grotesque shape, rose up from the floor of the cavern.

Among these formations on the floor were numerous domeshaped mud huts.

As Carter was dragged by, he stared at a hut that several rats were constructing. The framework was composed of white sticks of various shapes plastered with mud from an underground stream bed. The white sticks were very irregular in length and size. One of the rats stopped work to gnaw at a stick. It looked like a bone.

As he was dragged closer, he saw that the stick was a human thigh bone!

The mud huts were studded with bones and skulls, upon some of which were still dangling hideously the vestiges of hair and skin. Carter noticed that the tops of all the skulls had been removed, neatly sliced off.

The earthman was dragged to a clearing in the center of the cavern. Here, upon a mound of skulls, sat a rat half again as large as the others.

The baleful, pink eyes of the creature glared at Carter as he was dragged up on top of the mound.

The beasts released their hold upon the earthman and descended to the bottom of the mound, leaving Carter alone with the large rat.

The long whiskers of the monster were constantly twitching as the thing sniffed at the man. It had lost one ear in some battle long ago and the other was bright with scar-tissue.

Its little pink eyes surveyed Carter for a long time while it fondly caressed its long, hairless tail with its one claw-like paw.

This, evidently, was the King of the Rats.

"Lord of the Underworld," Carter thought, trying to hold his breath. The stench in the cavern was overwhelming.

WITHOUT taking his eyes from Carter's, the rat reached down and picked up a skull beside him and put it in front of Carter. This he repeated, picking up a skull from the other side and placing it beside the first. By repeating this, he eventually formed a little ring of topless heads in front of the earthman.

Now, very judiciously, he climbed inside the circle of skulls and picking one of them up tossed it to Carter. The earthman caught it and tossed it back at the king.

This seemed to annoy his royal highness. He made no effort to catch the skull and it flew past him and went bouncing down the mound.

Instead, the king leaped up and down inside the little circle of skulls, at the same time emitting angry squeals.

This was all very puzzling to the earthman. As he stood there, he became aware of two circles of rats forming at the base of the mound, each circle consisting of about a thousand animals. They began a weird dance, moving around the raised dais of bones counter-clockwise. The tail of each rat was gripped in the mouth of the follow-

ing beast, thus forming a continuous chain.

There was no doubt that the earthman was in the center of a weird ritual. While he was ignorant of the exact nature of the ceremony, he had little doubt as to its final outcome. The countless barren skulls, the yellowed bones that filled the cavern were mute, horrible evidence of his final fate.

Where did the rats get all the bodies from which the skulls were obtained and why were the tops of those skulls missing? The City of Korvas, as every Martain schoolboy knew, had been deserted for a thousand years; yet many of the skulls and bones were recently picked clean of their flesh. Carter had seen no evidence in the city of any life other than the great white apes and the mysterious giant, and the rats themselves.

However, there had been the woman's scream that he had heard earlier. This thought accentuated his ever-present anxiety over Dejah Thoris's safety and whereabouts.

This delay was tormenting. As the circles of rats closed in about him, the earthman's eyes eagerly searched for some avenue of escape.

The rats circled slowly, watching their king who rose to his hind legs stamping his feet, thumping his tail. The mound of skulls echoed hollowly.

Faster danced the king and faster moved the circles of rats drawing ever closer to the mound.

The closer rats shot hungry glances at the earthman. Carter smiled grimly and gripped his sword more tightly. Strange that they should let him retain it.

More than one of the beasts would die before he was overcome, and the king would be the first to go. There was no doubt that he was to be sacrificed to furnish a gastronomic orgy.

Suddenly the king stopped his wild gyrations directly in front of Carter. The dancers halted instantly, watching, waiting.

A STRANGE growling squeal started deep in the king's throat and grew in volume to an ear-piercing shriek. The King of Rats stepped over the ring of skulls and advanced slowly toward Carter.

Once again the earthman glanced about seeking some means of escape from the mound. This time he looked up. The ceiling was at least fifty feet away. No earthborn Martian would even consider escaping in that direction.

But John Carter had been born on the planet Earth, and he had brought with him to Mars all the strength and agility of a trained athlete.

It was upon this, combined with the lesser gravity of Mars, that the earthman made his quick plan for the next moment.

Tensely he waited for his opportunity. The ceremony was nearly concluded. The king was baring his fangs not a foot from Carter's neck.

The earthman's hand tightened on his sword-hilt; then the blade streaked from its scabbard. There was a blur of motion and a sickening smack. The king's head flew into the air and then rolled away, bouncing down the mound.

The other beasts beneath were stunned into silence, but only momentarily. Now, squealing wildly, they swarmed up the mound intent on tearing the earthman to pieces.

John Carter crouched and with a mighty leap his earthly muscles sent him shooting fifty feet up into the air.

Desperately he clutched and held to a hanging stalagtite. Soon he was swinging on the hanging moss to the vast upper reaches of the cavern.

Once he looked down to see the rats

milling and squealing in confusion beneath. One other fact he noted, also. Apparently there was only one means of entrance or exit into the dungeon that formed the rats' underground city, the same tunnel through which he had first been dragged.

Now, however, the earthman was intent upon finding some means of exit in the ceiling above.

At last he found a narrow opening; and plunging through a heavy curtain of moss, Carter swung into a cave.

There were several tunnels branching off into the darkness, most of them thickly hung with the sticky webs of the great Martian spider. They were evidently parts of a vast underground network of tunnels that had been fashioned long ages ago by the ancients who once inhabited Korvas.

CARTER was ready with his blade for any encounter with man or beast that might come his way; and so he started off up the largest tunnel.

The perpetually burning radium light that had been set in the wall when the tunnel was constructed furnished sufficient illumination for the earthman to see his way quite clearly.

Carter halted before a massive door set into the end of a tunnel. It was inscribed with hieroglyphics unfamiliar to the earthman. The subdued drone of what sounded like many motors seemed to come from somewhere beyond the door.

He pushed open the unbarred door and halted just beyond, staring unbelievingly at the tremendous laboratory in which he found himself.

Great motors pumped oxygen through low pipes into rows of glass cages that lined the walls and filled the antiseptically white chamber from end to end. In the center of the laboratory were several operating tables with large searchlights focused down upon them from above.

But the contents of the glass cages immediately absorbed the earthman's attention.

Each cage contained a giant white ape, standing upright inside, apparently lifeless.

The top of each hairy head was swathed in bandages. If these beasts were dead, why then the oxygen tubes running to their cages?

Carter moved across the room to examine the cases at closer range. Halfway to the farther wall he came upon a low, glassed dome that covered a huge pit set in the floor.

He gasped. The pit was filled with dead bodies, red warriors with the tops of their heads neatly sliced off!

CHAPTER V

Chamber of Horrors

FAR below, in the pit, John Carter could see forms moving in and about the bodies of the dead red men.

They were rats; and as he watched, the earthman could see them dragging bodies off into adjoining tunnels. These tunnels probably entered the main one which ran into the rats' underground city.

So this was where the beasts got the skulls and bones with which they constructed their odorous, underground dwellings!

Carter's eyes scanned the laboratory. He noted the operating tables, the encased instruments above, the anesthetics. Everything pointed to some grisly experiment, conducted by some insane scientist.

Within a glass case were many books. One ponderous volume was inscribed in gold letters: PEW MOGEL, HIS LIFE AND WONDERFUL WORKS.

The earthman frowned. What was the explanation? Why this well-equipped laboratory buried in an ancient lost city, a city apparently deserted except for apes, rats, and a giant man?

Why the cases about the wall containing the mute, motionless bodies of apes with bandaged heads? And the red men in the pit—why were their skulls cut in half, their brains removed?

From whence came the giant, the monstrous creature whose likeness had existed only in Barsoomian folklore?

One of the books in a case before Carter bore the name "Pew Mogel." What connection had Pew Mogel with all this and who was the man?

But more important, where was Dejah Thoris, the Princess of Helium?

John Carter reached for Pew Mogel's book. Suddenly the room fell silent. The generators that had been humming out their power, stopped.

"Touch not that book, John Carter," came the words echoing through the laboratory.

Carter's hand dropped to his sword. There was a moment's pause; then the hidden voice continued.

"Give yourself up, John Carter, or your princess dies." The words were apparently coming from a concealed loudspeaker somewhere in the room.

"Through the door to your right, earthman, the door to your right."

Carter immediately sensed a trap. He crossed to the door. Warily, he pushed it open with his foot.

UPON a gorgeous throne at the far end of a huge dome-shaped chamber sat a hideous, misshapen man. A tiny, bullet head squatted upon massive shoulders.

Everything about the creature seemed distorted. His torso was crooked, his arms were not equal in length; one foot was larger than the other.

The face in the diminutive head leered at John Carter. A thick tongue hung partly out over yellowed teeth.

The hulking body was encased in gorgeous trappings of platinum and diamonds. One claw-like hand stroked the bare head.

From head to foot there was apparently not a hair on his body!

At the man's feet crouched a great, four-armed shaggy brute — another white ape. Its little red eyes were fixed steadily upon the earthman as he stood at the far end of the chamber.

The man on the throne idly fingered the microphone with which he had summoned Carter to the room.

"I have trapped you at last, John Carter!" Beady, cocked eyes glared with hatred. "You cannot cope with the great brain of Pew Mogel!"

Pew Mogel turned to a television screen studded with dials and lights of various colors.

His face twisted into a smile. "You honor my humble city, John Carter. It is with the greatest interest I have watched your progress through the many chambers of the palace with my television machine." Pew Mogel patted the machine.

"This little invention of my good teacher, Ras Thavas," continued Pew Mogel, "which I acquired from him, has been an invaluable aid to me in learning of your intended search for my unworthy person. It was unfortunate that you should suspect the honorable intentions of my agent that afternoon in the Jeddak's chambers.

"Fortunately, however, he had already completed his mission; and through an extension upon this television set, concealed cleverly behind a mirror in the Jeddak's private throne room, I was able to see and hear the

entire proceedings."

Pew Mogel laughed vacantly, his little unblinking eyes staring steadily at Carter who remained motionless at the other end of the room.

The earthman could see nothing in the chamber that indicated a trap. The walls and floor were all of grey, polished ersite slabs. Carter stood at one end of a long aisle leading to Pew Mogel's throne.

Slowly he advanced toward Pew Mogel, his hand grasping his sword, the muscles of his arm etched bands of steel.

Halfway down the aisle, the earthman halted. "Where is Dejah Thoris?" His words cut the air.

The microcephalic* head of Pew Mogel cocked to one side. Carter waited for him to speak.

IN spite of having the features of a man, Pew Mogel did not look quite human. There was something indescribably repulsive about him, the thin lips, the hollow cheeks, the close-set eyes.

Then Carter realized that those eyes were unblinking. There were no eyelids. The man's eyes could never close.

Pew Mogel spoke coldly. "I am greatly indebted to you for this visit. I was fortunate enough to be able to entertain your princess and your best friend; but I hardly dared to hope you would honor me, too."

Carter's face was expressionless. Slowly he repeated. "Where is Dejah Thoris?"

Pew Mogel leered mockingly.

The earthman advanced toward the throne. The white ape at Pew Mogel's feet growled, the hairs on its neck bristling upright as Pew Mogel flinched slightly.

Again the twisted smile passed over his face as he raised his hand toward John Carter and drawled.

"Have patience, John Carter, and I will show you your princess; but first, perhaps you will be interested in seeing the man who, last night, told you to meet him at the main bridge outside the city."

Pew Mogel hooked one of his fingers over a lever projecting from the golden arm of his throne and slipped it toward himself. A pillar to the left of his throne, half set in the wall, began to revolve slowly.

A giant green man appeared, chained to the pillar. His four mighty arms were strapped securely; and for Pew Mogel's additional safety, several steel chains were wrapped around his body and cinched with massive padlocks. His neck and ankles were also secured with bands of steel, also padlocked.

"Tars Tarkas!" Carter exclaimed.

"Koar, John Carter," there was a grim smile on Tars Tarkas' face as he replied. "I see our friend here trapped us both the same way; but it took a giant fifteen times my size to hold me while they trussed me in these chains."

"The message you sent me last night—" In a flash, Carter realized the truth. Pew Mogel had faked the messages from Kantos Kan and Tars Tarkas, trapping them both in the city the night before.

"Yes, I sent you both identical messages," said Pew Mogel, "each message apparently from the other. The prop-

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* A microcephalic head is one possessing a very small brain capacity. It is the opposite of megacephalic, which means a large brain capacity. Generally microcephalia is a sign of idiocy, although in the case of Pew Mogel, the condition did not mean idiocy, but extreme craftiness, and madness, which might indicate that, since Pew Mogel was an artificial, synthetic product of Ras Thavas, one of Mars most famous scientists, his microcephalia was either caused by a disease, or by inability of the brain to adapt itself to a foreign, ill-fitting cranial cavity. Pew Mogel's head was obviously too small for his body, or for his brain.—Ed.

er broadcasting length I ascertained from listening to the concealed microphone I had planted in the Jeddak's throne room. Clever, eh?"

PEW MOGEL'S left eye suddenly popped out of its socket and dangled on his cheek. He took no notice of it, but continued to speak, glancing first at Carter and then at Tars Tarkas with the other eye.

"You have both met Joog," stated Pew Mogel. "One hundred and thirty feet tall, he is all muscle, a product of science, the result of my great brain.

"With my own hands I created him from living flesh, the greatest fighting monster that Barsoom has ever seen.

"I modeled him from the organs, tissues, and bones of ten thousand red men and white apes."

Pew Mogel, becoming aware of his left eye, quickly shoved it back into place.

Tars Tarkas laughed one of his rare laughs.

"Pew Mogel," he said, "you are falling apart. As you claim to have created your giant, so you yourself have been made.

"Unless I miss my guess, John Carter," continued Tars Tarkas, "this freak before us who calls himself a king has, himself, crawled out of a tissue vat!"

Pew Mogel's pallid countenance turned even paler as he leaped to his feet. He struck Tars Tarkas a vicious blow on the face.

"Silence, green man!" he shrieked.

Tars Tarkas only smiled at this insult, ignoring the pain. John Carter's face was a frozen mask. One more blow at his defenseless friend would have sent him at Pew Mogel's throat.

Better to bide his time, he knew, until he learned where Dejah Thoris was hidden.

Pew Mogel sank back upon his throne. The white ape, who had risen, once more squatted down at his master's feet.

Presently Pew Mogel smiled again.

"So sorry," he drawled, "that I lost my temper. Sometimes I forget that my present appearance reveals the nature of my origin.

"You see, soon I shall have trained one of my apes in the intricate procedure of transferring my marvelous brain into a suitable, handsome body; then no one will guess that I am not like any other normal man on Barsoom."

John Carter smiled grimly at Pew Mogel's words.

"Then you *are* one of Ras Thavas' synthetic men?"

CHAPTER VI

Pew Mogel

"YES, I am a synthetic man," answered Pew Mogel slowly. "My brain was the greatest achievement of all the Master Mind's creations.

"For years I was a devoted pupil of Ras Thavas in his laboratories at Morbus. I learned all that the Master Mind could teach me of the secrets of creating living tissue. When I learned from him all that I thought necessary to pursue my plans, I left Morbus. With a hundred synthetic men I escaped over the Great Toonolian Marshes on the backs of malagors, the birds of transport.

"I brought with me all the intricate equipment that I could steal from his laboratories. The rest, I have fashioned here in this ancient deserted city where we finally landed."

John Carter was studying Pew Mogel intently.

"I was tired of being a slave," continued Pew Mogel. "I wanted to rule;

and by Issus, I have ruled; and some day I shall rule all Barsoom!"

Pew Mogel's eyes gleamed.

"It was not long before red men gathered in our city, escaped and exiled criminals. Since their faces would only lead them to capture and execution in other civilized cities on Barsoom, I persuaded them to allow me to transfer their brains into the bodies of the stupid white apes that overran this city.

"I promised to later restore their brains into the bodies of other red men, provided they would help me in my conquests."

Carter recalled the apes with the bandaged heads in the adjoining laboratory, and the red men with their skulls sliced off in the chamber of the rats. He began to understand a little; then he remembered Joog.

"But the giant?" asked John Carter. "Whence came he?"

Pew Mogel was silent for a minute; then he spoke.

"Joog I have built, piece by piece, during several years, from the bones, tissues and organs of a thousand red men and white apes who came voluntarily to me or whom I captured.

"Even his brain is the synthesis of the brains of ten thousand red men and white apes. Into Joog's veins I have pumped a serum that makes all tissues self-repairing.

"My giant is practically indestructible. No bullet or cannon-shot made can stop him!"

Pew Mogel smiled and stroked his hairless chin.

"Think how powerful my ape soldiers will be," he purred, "each one armed with the great strength of an ape. With their four arms they can hold twice as many weapons as ordinary men, and inside their skulls will function the cunning brains of human beings.

"With Joog and my army of white apes, I can go forth and become master of all Barsoom." Pew Mogel paused and then added, "—provided I acquire more iron for even greater weapons than I already have."

Now Pew Mogel had risen from his throne in his great excitement.

"I preferred to conquer peacefully by first acquiring the Helium iron works as payment for Dejah Thoris's safe return. But the Jeddak and John Carter force me into other alternatives—

"However, I'll give you one more chance to settle peacefully," he said.

Pew Mogel's hand moved toward the right arm of his throne, as he pulled a duplicate lever. A beautiful woman swung into view.

It was Dejah Thoris!

AT the sight of his princess chained to the other pillar before him, John Carter grew very pale. He sprang forward to free her.

His earthly muscles could have easily covered the distance in one leap; but halfway there in his spring, Dejah Thoris and Tars Tarkas saw the earthman sprawl in mid-air as though he had struck full force against some invisible barrier. Half-stunned, he crumpled to the floor.

Dejah Thoris gave a little cry. Tars Tarkas strained at his bonds. Slowly, the earthman rose to his feet, shaking his body like some majestic animal. With his sword he reached down and felt the barrier that stood between him and the throne.

Pew Mogel laughed harshly.

"You are trapped, John Carter. The invisible glass partition that you struck is another invention of the great Ras Thavas that I acquired. It is invulnerable.

"From there, you may watch the torture of your princess, unless she sees fit to sign a note to her father demand-

ing the surrender of Helium to me."

The earthman looked at his princess not ten feet from him. Dejah Thoris held her head proudly high, which was answer enough to Pew Mogel's demands that she betray her people.

Pew Mogel saw, and angrily issued a command to the ape. The white brute rose and ambled over to Dejah Thoris. Grabbing her hair with one paw, he forced her head back until he could see her face. His hideous, grinning face was not two inches from hers.

"Demand Helium's surrender," hissed Pew Mogel, "and you shall have your freedom!"

"Never!" the word shot back at him.

Pew Mogel flung another command to the ape.

The creature planted his great, pendulous lips on those of the princess. Dejah Thoris went limp in his embrace, while Tars Tarkas surged vainly at the steel chains. The girl had fainted.

The earthman again hurled himself futilely against the barrier that he could not see.

"Fool," yelled Pew Mogel, "I gave you your chance to regain your princess by turning over to me the Helium iron works; but you and the Jeddak thought you could thwart me and regain Dejah Thoris without paying me the price I asked for her safe return. For that mistake, you all die."

PEW MOGEL again reached over to the instrument board beside his throne. He began to turn several dials, and Carter heard a strange, droning noise that increased steadily in volume.

Suddenly the earthman turned and raced for the door through which he came.

But before he had covered fifteen feet, another barrier had closed down. Escape through the door was impossible.

There was a window over on the wall to his right. He leaped for it. He struck another glass barrier.

There was another window on the left side of the room. He had nearly reached it when he was met by another wall of invisible glass.

In a flash he became acutely conscious of his predicament. The walls were moving in upon him. He could see now that the glass barriers had moved out from cleverly concealed slits in the adjoining walls.

The two side barriers, however, were fastened to horizontal pistons in the ceiling. These pistons were moving together, bringing the glass walls toward each other, and would eventually crush the earthman between them.

Upon John Carter's finger was a jeweled ring. Set in the center of the ring was a large diamond.

Diamonds can cut glass!

Here was a new type of glass, but the chances were it was not as hard as the diamond on Carter's finger!

The earthman clenched his fist, pressed the diamond ring against the barrier in front of him and quickly made a large circular scratch in the glass surface.

Then he crashed his body with all his strength against the area of glass enclosed by the scratch.

The section broke out neatly at the blow, and the earthman found himself face to face with Pew Mogel.

Dejah Thoris had regained consciousness, a set, intent expression on her beautiful face. A grim smile had settled over Tars Tarkas's lips when he saw that his friend was no longer impeded by the invisible barriers.

Pew Mogel shrank back on his throne and gasped in a cracked voice.

"Seize him, Gore, seize him!" Little beads of sweat stood forth on his brow.

Gore, the white ape, released his hold

Two people sat in a saddle on the thoat's broad back

on Dejah Thoris and, turning, saw the earthman advancing toward them. Gore snarled viciously, revealing jagged, mighty fangs. He crouched low, so that his four massive fists supported his weight on the floor. His little, beady, blood-shot eyes gleamed hatred, for Gore hated all men save Pew Mogel.

CHAPTER VII

The Flying Terror

AS Gore, the great white ape with a man's brain, crouched to meet John Carter, he was fully confident of overcoming his puny man opponent.

But to make assurance doubly sure, Gore drew the great blade at his side and rushed madly at his foe, hacking and cutting viciously.

The momentum of the brute's attack forced Carter backward a few steps as he deftly warded off the mighty blows.

But the earthman saw his chance. Quickly, surely, his blade streaked. There was a sudden twist and Gore's sword went hurtling across the room.

Gore, however, reacted with lightning speed. With his four huge hands he grasped the naked steel of the earthman's sword.

Violently he jerked the blade from Carter's grasp and, raising it overhead, snapped the strong steel in two as if it had been a splinter of wood.

Now, with a low growl, Gore closed in; and Carter crouched.

Suddenly the man leaped over the ape's head; but again with uncanny speed the monster shot out a hairy hand and grasped the earthman's ankle.

Gore held John Carter in his four hands, drawing the man closer and closer to the drooling jowls and gleaming fangs.

But with a surge of his mighty muscles, the earthman jerked free his arm and sent a terrific blow crashing full into Gore's face.

The ape recoiled, dropping John Carter, and staggered back toward the huge window on the right wall by Pew Mogel's throne.

Here the beast tottered; and the earthman, seeing his chance, once again leaped into the air, but this time flew feet foremost toward the ape.

At the moment of contact with the ape's chest, Carter extended his legs violently; and so, as his feet struck Gore, this force was added to the hurtling momentum of his body.

With a bellowing cry, Gore hurtled out through the window and his screams ended only when he landed with a sickening crunch in the courtyard far below.

Dejah Thoris and Tars Tarkas, chained to the pillars, had watched the short fight, fascinated by the earthman's sure, quick actions.

But when Carter did not succumb instantly to Gore's attack, Pew Mogel had grown frightened. He began jerking dials and switches; and then spoke swiftly into the little microphone beside him.

So now, as the earthman regained his feet and advanced slowly toward Pew Mogel, he did not see the black shadow that obscured the window behind him.

Only when Dejah Thoris screamed a warning did the earthman turn.

But he was too late!

A giant hand, fully three feet across, closed about his body. He was lifted from the floor and pulled out quickly through the window.

To Carter's ears came the hopeless cry of his princess mingled with the cruel, hollow laugh of Pew Mogel.

CARTER did not need the added assurance of his eyes to know that he was being held in the grasp of Pew

Mogel's synthetic giant. Joog's fetid breath blasting across his face was ample evidence.

Joog held Carter several feet from his face and contracted his features in the semblance of a grin, exposing his two great rows of cracked, stained teeth the size of sharp boulders.

Hoarse, gurgling sounds emanated from Joog's throat as he held the earthman before his face.

"I, Joog. I, Joog," the monster finally managed. "I can kill! I can kill!"

Then he shook his victin until the man's teeth rattled.

But quite suddenly the giant was quiet, listening; then Carter became aware of muffled words coming, apparently, from Joog's ear.

"To the arena. Take him to the arena!" came the words out of Joog's ear.

Then John Carter realized that the command was coming from Pew Mogel, transmitted by short wave to a receiving device attached to one of Joog's ears.

"To the arena," repeated the voice. "Fasten him over the pit!"

The pit—what new form of devilish torture was this? Carter tried vaguely to ease the awful pressure that was crushing him.

But his arms were pinned to his sides by the giant's grasp. All the man could do was breathe laboriously and hope that Joog's great strides would soon bring them to his destination, whatever that might be.

The giant's tremendous pace, stepping over tall, ancient edifices or across wide, spacious plazas in single, mighty strides, soon brought them to a large, crowded amphitheatre on the outskirts of the city.

The amphitheatre apparently was fashioned from a natural crater. Row upon row of circular tiers had been carved within the inner wall of the crater, forming a series of levels upon which sat thousands of white apes.

In the center of the arena was a circular pit about fifty feet across. The pit contained what appeared to be water whose level was about fifteen feet from the top of the pit.

Three iron-barred cages hung suspended over the center of the pit by means of three heavy ropes, one attached to the top of each cage and running up through a pulley in the scaffolding built overhead and down to the edge of the pit where it was anchored.

Joog climbed partly over the edge of the coliseum and deposited Carter on the brink of the pit. Five great apes held him there while another ape lowered one of the cages to ground level.

Then he reached out with a hooked pole and swung the cage over the edge. He unlocked the cage door with a large key.

The keeper of the key was a short, heavy-set ape with a bull neck and exceedingly cruel, close-set eyes.

This brute now came up to Carter; and although the captive was being held by five other apes, he grabbed him cruelly by the hair and jerked Carter into the cage, at the same time kicking him viciously.

The cage door was slammed immediately, its padlock bolted closed. Now Carter's cage was pulled up over the pit and the rope end anchored to a davit at the edge.

It was not long before Joog returned with Dejah Thoris and Tars Tarkas. Their chains had been removed.

THEY were placed in the other two cages that hung over the pit next to that of John Carter.

"Oh, John Carter, my chieftain!" cried Dejah Thoris, when she saw him

in the cage next to hers. "Thank Issus you are still alive!" The little princess was crying softly.

John Carter reached through the bars and took her hand in his. He tried to speak reassuring words to her; but he knew, as did Tars Tarkas, who sat grim-faced in the other cage beside his, that Pew Mogel had ordained their deaths—but in what manner they would die, Carter, as yet, was uncertain.

"John Carter," spoke Tars Tarkas softly, "do you notice that all these thousands of apes gathered here in the arena apparently are paying no attention to us?"

"Yes, I noticed," replied the earthman. "They are all looking into the sky toward the city."

"Look," whispered Dejah Thoris. "It's the same thing upon which the ape rode when he captured me in the Helium Forest after shooting our thoat!"

There appeared in the sky, coming from the direction of the city, a great, lone bird upon whose back rode a single man.

The earthman's keen eyes squinted for an instant. "The bird is a malagor. Pew Mogel is riding it."

The bird and its rider circled directly overhead.

"Open the east gate," Pew Mogel commanded, his voice ringing out through a loudspeaker somewhere in the arena. The gates were thrown open and there began pouring out into the arena wave after wave of malagors exactly like the bird Pew Mogel rode.

As the malagors came out, column after column of apes were waiting at the entrance to vault onto the birds' backs. As each bird was mounted, it rose into the air by telepathic command to join a constantly growing formation circling high overhead.

The mounting of the birds must have taken nearly two hours, so great were the number of Pew Mogel's apes and birds. Carter noticed that upon each ape's back was strapped a rifle and each bird itself carried a varying assortment of military equipment, including ammunition supplies, small cannon; and a sub-machine gun was carried by each flight platoon.

At last all was ready and Pew Mogel descended down over the cages of his three captives.

"You see, now, Pew Mogel's mighty army," he cried, "with which he will first conquer Helium and then all Barsoom." The man seemed very confident, for his crooked, misshapen body sat very straight upon his feathered mount.

"Before you are chewed to bits by the reptiles in the rising water below you," he said, "you will have a few moments to consider the fate that awaits Helium within the next forty-eight hours. I should have preferred to conquer peacefully; but you interfered. For that, you die, slowly and horribly."

Pew Mogel turned to the only ape that was left in the arena, the keeper of the key to the cages.

"Open the flood-gate!" was his single command before he rose up to lead his troops off toward the north.

Accompanying the weird, flying army in a sling carried by a hundred malagors rode Joog, the synthetic giant. A hollow, mirthless laugh peeled like thunder from the giant's throat as he was borne away into the sky.

CHAPTER VIII

The Reptile Pit

AS the last bird in Pew Mogel's fantastic army flapped out of sight behind the rim of the crater, John Carter turned to Tars Tarkas in the cage hanging beside him. He spoke softly, so that Dejah Thoris would not hear.

"Those creatures will make Helium a formidable enemy," he said. "Kantos Kan's splendid airfleet and infantry will be hard pressed against those thousands of apes equipped with human brains and modern armament, mounted upon fast birds of prey!"

"Kantos Kan and his airfleet are not even in Helium to protect the city," announced Tars Tarkas grimly. "I heard Pew Mogel bragging that he had sent Kantos Kan a false message, supposedly from you, urging that all Helium's fleet, as well as all ships of the searching party, be dispatched to your aid in the Great Toonolian Marshes."

"The Toonolian Marshes!" Carter gasped. "They're a thousand miles from Helium in the other direction."

A little scream from Dejah Thoris brought the men's attention to their own, immediate fate.

The ape beside the pit had pulled back a tall, metal lever. There was a gurgle of bubbles as air blasted up from the water in the pit below the three captives; and the water at the same time commenced to rise slowly.

The guard now unfastened the rope on each cage and lowered them so that the cage tops were a little below the surface of the ground inside the pit; then he refastened the ropes and stood for some time on the brink looking down at the helpless captives.

"The water rises slowly," he sneered thickly; "and so I shall have time now for a little sleep."

It was uncanny to hear words issuing from the mouth of the beast. They were barely articulate, for although the human brain in the ape's skull directed the words, the muscles of the larynx in the creature's throat were normally unequipped for the specialized task of human speech.

The guard lay down on the brink and stretched his massive, squat body.

"Your death cries will awaken me," he mumbled pleasantly, "when the water begins to envelop your feet and the reptiles start clawing at you through the bars of your cages." Whereupon, the ape rolled over and began snoring.

It was then that the three captives saw the slanting, evil eyes, the rows of flashing teeth, in a dozen hideous, reptilian faces staring greedily up at them from the rising waters below.

"Quite ingenious," remarked Tars Tarkas, his stoic face giving no more evidence of fear than did that of the earthman. "When the water partly submerges us, the reptiles will reach in with their claws and begin tearing us to pieces—if there is any life left in us, the rising water will drown it out when finally it submerges the tops of our cages."

"How horrible!" gasped Dejah Thoris.

John Carter's eyes were fastened on the brink of the pit. From his cage he could just see one of the guard's feet as the fellow lay asleep at the edge of the pit.

Cautioning the others to silence, Carter began swinging his body back and forth while he held fast to the bars of his cage. If he could just get his cage to swinging!—

THE water had risen to about ten feet below their cages.

It seemed an eternity before he could get the heavy cage to even moving slightly. Nine feet to the water surface and those hideous, staring eyes and those gleaming teeth!

The cage was swinging now a little more, in rhythm to the earthman's constantly swaying body.

Eight feet, seven feet, six feet came the water. There were about ten reptiles in the water below the captives—ten pairs of narrow, evil eyes fixed

steadily on their prey.

The cage was swinging faster.

Five feet, four feet. Tars Tarkas and Dejah Thoris could feel the hot breath of the reptiles!

Three, two feet! Only two more feet to go before the steadily swinging cage would cut into the water and slow down again to a standstill.

But the iron prison, swinging pendulum-like, would reach the brink on its next swing; so this time as the cage moved toward the brink on which lay the sleeping guard, John Carter knew he must act and act quickly!

As the bars of the cage smacked against the cement wall of the pit, John Carter's arms shot out with the quickness of a striking snake.

His fingers closed in a grip of steel about the ankle of the sleeping guard.

An ear-piercing shriek rang out across the arena, echoing dismally in the hollow crater, as the ape felt himself jerked suddenly from his slumbers.

Back swung the cage. Carter regrasped the shrieking ape with his other hand through the bars as they swung out over the water. The reptiles had to lower their heads as the cage moved over them, so close had the water risen.

"Good work, John Carter," came Tars Tarkas's tense words as he reached out and grabbed hold of the ape with his four mighty hands. At the same time, Carter's cage splashed to a sudden stop. It had hit the water's surface.

"Hold him, Tars Tarkas, while I pull the key off the scoundrel's neck—there, I've got it!"

The water was flowing over the bottom of the cages. One of the reptiles had reached a horny arm into Dejah Thoris's cage and was attempting to snag her body with its sharp, hooked claws.

Tars Tarkas flung the ape's body with all the force of his giant thews straight at the reptile beside the girl's cage.

There was a thump, a splash, and a gurgling, sickening shriek as the ape hit the reptile's back, flopped into the water, and was piled upon by the other creatures.

"Quickly, John Carter," cried Dejah Thoris. "Save yourself while they are fighting over the ape's body."

"Yes," echoed Tars Tarkas, "unlock your cage and get out while there is still time."

A HALF-SMILE lifted the corner of Carter's mouth as he swung open his prison door and leaped to the top of Dejah Thoris's cage.

"I'd sooner stay and die with you both," the earthman said, "than desert you now."

Carter soon had the princess' prison door unlocked; but as he reached down to lift the girl up, a reptile darted forward into the cage with the princess.

In a quick second, Carter was inside the girl's cage, already knee-deep in water; and he had hurled himself onto the back of the reptile. A steely arm was clamped tightly around the creature's neck. The head was jerked back just in time, for the heavy jaws snapped closed only an inch from the girl's body.

"Climb out, Dejah Thoris—to the top of the cage!" ordered Carter. When the girl had obeyed, Carter dragged the flopping, helpless reptile to the cage door, as other slimy monsters started in. Using its body as a shield before him, the earthman forced his way to the door.

In an instant he had released his hold and vaulted up on top of the cage with the girl.

A moment later he had unlocked Tars Tarkas's cage door. After the green

man had swung up beside them without mishap, the three climbed the ropes to the scaffolding above and then lowered themselves down to the ground beside the pit.

"Thank Issus," breathed the girl as they sat down to regain their breaths. Her beautiful head was cushioned upon Carter's shoulder, and he stroked her lovely black hair reassuringly.

PRESENTLY the earthman rose to his feet. Tars Tarkas had motioned him across the arena.

"There are some malagors left inside here," Tars Tarkas called from the entrance to the cavern inside the crater from where had come Pew Mogel's mounts.

"Good!" exclaimed Carter. "There may be a chance yet to reach and help Helium."

A moment later they had caught two of the birds and had risen over the ancient city of Korvas.

They spotted their planes on the outskirts of the city where they had left them the night they were tricked into being captured by Pew Mogel.

But to their disappointment, the controls had been destroyed irreparably, so that they were forced to continue their journey on the backs of the malagors.

However, the malagors proved speedy mounts. By noon the next day the trio had reached the City of Thark, inhabited by a hundred thousand green warriors over whom Tars Tarkas ruled.

Gathering the warriors together in the market-place, Tars Tarkas and John Carter explained the peril that confronted Helium and asked for their support in marching to their allies' aid.

As one man, the mighty warriors shouted their approval. The next day dawned upon a long caravan of thoat-mounted soldiers streaming out from the city gates toward Helium.

A messenger was sent on a malagor to the Toonolian Marshes in an attempt to locate Kantos Kan and urge him to return home with his fleet to aid in the defense of Helium.

Tars Tarkas had abandoned his malagor to this messenger, in favor of a thoat upon which he rode at the head of his warriors. Directly above him, mounted on the other malagor, rode Dejah Thoris and John Carter.

CHAPTER IX

Attack on Helium

JOHN CARTER and Dejah Thoris, mounted upon their malagor, were scouting far ahead of the main column of advancing warriors when they first came into sight of the besieged City of Helium.

It was bright moonlight. The princess voiced a little, disappointed cry when she looked out across the spacious valley toward Helium. Her grandfather's city was completely surrounded by the besieging troops of Pew Mogel.

"My poor city!" The girl was crying softly, for in the bright moonlight below could be easily discerned the terrific gap in the ramparts and the many crushed and shattered buildings of the beautiful metropolis.

John Carter telepathically commanded the malagor to land upon a high peak in the mountains overlooking the Valley of Helium.

"Listen," cautioned John Carter. Pew Mogel's light entrenched cannon and small arms were commencing to open fire again by moonlight. "They are getting ready for an air attack."

Suddenly, from behind the low foothills between the valley and the towering peaks, there rose the vast, flying army of Pew Mogel.

"They are closing in from all sides,"

Dejah Thoris cried.

The great winged creatures and their formidable ape riders were swooping down relentlessly upon the city. Only a few of Helium's airships rose to give battle.

"Kantos Kan must have taken nearly all Helium's fleet with him," the earthman remarked. "I am surprised Helium has withstood the attack as long as this."

"You should know my people by now, John Carter," replied the princess.

"The infantry and anti-aircraft fire entrenched in Helium are doing well," Carter replied. "See those birds plummet to the ground."

"They can't hold out much longer, though," the girl replied. "Those apes are dropping bombs squarely into the city, as they swoop over, wave after wave of them—oh, John Carter, what can we do?"

John Carter's old fighting smile, usually present at times of personal danger, had given way to a stern, grave expression.

He saw below him the oldest and most powerful city on Mars being conquered by Pew Mogel's forces. Armed with Helium's vast resources, the synthetic man would go forth and conquer all civilized nations on Mars.

Fifty thousand years of Martian learning and culture wrecked by a power-mad maniac—himself the synthetic product of civilized man!

"Is there nothing we can do to stop him, John Carter?" came the girl's repeated question.

"Very little, I'm afraid, my princess," he replied sadly. "All we can do is station Tars Tarkas's green warriors at advantageous points in preparation for a counter-attack and trust to fate that our messenger reached Kantos Kan in time that he may return and aid us.

"Without supporting aircraft, our green warriors, heroic fighters that they are, can do little against Pew Mongel's superior numbers in the air."

WHEN John Carter and Dejah Thoris returned to Tars Tarkas, they reported what they had seen.

The great Thark agreed that his warriors could avail but little in a direct attack against Pew Mogel's air force. It was decided that half their troops be concentrated at one point and at dawn attempt to rush through into the City.

The remaining half of the warriors would scatter into the mountains in smaller groups and engage the enemy in guerrilla warfare.

Thus they hoped to forestall the fate of Helium until Kantos Kan returned with his fleet of speedy air fighters.

"Helium's fleet of trim, metal fighting craft will furnish Pew Mogel's feathered bird brigade a worthy enemy," remarked Tars Tarkas.

"Provided, of course," added Carter, "Kantos Kan's fleet reaches Helium before Pew Mogel has entrenched himself in the City and returned his own anti-aircraft guns upon them."

All that night in the mountains, under cover of semi-darkness, John Carter and Tars Tarkas reorganized and restationed their troops. By dawn all was ready.

John Carter and Tars Tarkas would lead the advance half of the Tharks in a wild rush toward the gates of Helium; the other half would remain behind, covering their comrades' assault with long-range rifles.

Much against the earthman's will, Dejah Thoris insisted she would ride into the City beside him upon their malagor.

It was just commencing to grow brighter.

"Prepare to charge," Carter ordered. Tars Tarkas passed the word down by

his orderly to his unit commanders.

"Prepare to charge! Prepare to charge!" echoed down and across the battalions of magnificent, four-armed, green fighters astride their eight-legged, massive, restless thoats.

The minutes dragged by as the troop lines swung around. Steel swords were drawn from scabbards. Hammers, on short, deadly ray-pistols, clicked back as they cocked over saddle pommels.

John Carter looked around at the girl sitting so straight and steady behind him.

"You are very brave, my princess," he said.

"It's easy to be brave," she replied, "when I'm so close to the greatest warrior on Mars."

"Charge!" came Carter's terse, sudden order.

DOWN the mountain and across the plain toward Helium streaked the savage horde of Tharks. Out ahead raced Tars Tarkas, his sword held high.

Far ahead and above, on speedy wings, streaked the malagor carrying John Carter and the Princess of Helium.

"John Carter, thank Issus!" Dejah Thoris cried in relief, and pointed toward the far mountain skyline.

"The Helium Fleet has returned," shouted John Carter. "Our messenger reached Kantos Kan in time!" Over the mountains, with flying banners streaming, sailed the mighty Helium Fleet.

There was a moment's silence in the entrenched guns of the enemy. They had seen the charging Tharks and the Helium Fleet simultaneously.

A great cry of triumph rose from the ranks of the charging warriors at sight of the Helium Fleet streaking to their aid.

"Listen," cried Dejah Thoris to Carter, "the bells of Helium are tolling our victory song!" Then it seemed as though all of Pew Mogel's guns broke loose at once; and from behind the protecting hills rose his flying legions of winged malagors. Upon their backs rode the white apes with men's brains.

Down upon the legions of Tharks came wave after wave of Pew Mogel's feathered squadrons. In true blitzkrieg fashion, the birds would swoop down just out of sword's reach over the green warriors. As each bird pulled out of its dive, the ape on its back would empty its death-dealing atom-gun into the mass of warriors beneath.

The carnage was terrific. Only after Tars Tarkas and John Carter had led their warriors into the first lines of entrenched apes did the Tharks find an enemy with whom they could fight effectively.

Here, the four-armed green soldiers of Thark fought gloriously against the great white apes of Pew Mogel's ghastly legions.

But never for a second did the horrible death-diving squadrons cease their attacks from above. Like angry hornets, the thousands dove, killed, climbed, dove, and killed again—always killing.

John Carter masterfully controlled his frightened bird while he issued orders and directed attacks from his vantage point immediately above the center of battle.

Bravely, efficiently, the Princess of Helium protected her chieftain against countless side and rear attacks from the air. The barrel of her radium pistol was red-hot with constant firing; and many were the charging birds and shrieking apes she sent catapulting into the melee below.

Suddenly a hoarse shout rose again from Pew Mogel's legions on ground and in air.

"What is it, my chieftain?" cried the

girl. "Why are the enemy shouting in triumph?"

John Carter looked toward the advancing ships now over the mountains only a half mile away; then his blood ran cold.

"The giant—Joog, the giant!"

THE creature had risen up from behind the shelter of a low hill, as the ships approached above him. The giant grasped a huge tree trunk in his mighty hand.

Even from where they were, John Carter could discern the head of a man sitting in an armor-enclosed, steel howdah strapped to the top of Joog's helmet.

From the giant's lips there suddenly issued a thunderous, shrieking roar that echoed in the mountains and across the plain.

Then he clambered swiftly to the top of a small hill. Before the astonished Heliumites could swerve their speeding craft, the giant struck out mightily with the great tree trunk.

The great, synthetic muscles of Pew Mogel's giant swung the huge weapon full into the advancing craft.

The vanguard of twenty ships, the pride of Helium's airfleet met the blow head-on—went smashing and shattering against the mountain-side, carrying their crews to swift, crushing death!

CHAPTER X

Two Thousand Parachutes

KANTOS KAN'S flagship narrowly escaped annihilation at the first blow of the giant. The creature's club only missed the leading ship by a few feet.

From their position on the malagor, John Carter and Dejah Thoris could see many of the airships turning back toward the mountains. Others, however, were not so fortunate.

Caught in the wild rush of air resulting from the giant's swinging club, the craft pitched and tossed crazily out of control.

Again and again the huge tree trunk split through the air as the giant swung blow after blow at the helpless ships.

"Kantos Kan is re-forming his fleet," John Carter shouted above the roar of battle as the fighting on the ground was once more resumed with increased zeal.

"The ships are returning again," cried the princess, "toward that awful creature!"

"They are spreading out in the air," the earthman replied. "Kantos Kan is trying to surround the giant!"

"But why?"

"Look, they are giving him some of Pew Mogel's own medicine!"

Helium's vast fleet of airships was darting in from all sides. Others came zooming down from above. As they approached within range of their massive target, the gunners would pour out a veritable hail of bullets and rays into the giant's body.

Dejah Thoris sighed in relief.

"He can't stand that much longer!" she said.

John Carter, however, shook his head sadly as the giant began to strike down the planes with renewed fury.

"I'm afraid it's useless. Not only those bullets but the ray-guns as well are having no effect upon the creature. His body has been imbued with a serum that Ras Thavas discovered. The stuff spreads throughout the tissue cells and makes them grow immediately with unbelievable speed to replace all wounded or destroyed flesh."

"You mean," Dejah Thoris asked, horror-stricken, "the awful monster might never be destroyed?"

"It is probable that he will live and

grow forever," replied the earthman, "unless something drastic is done to destroy him—"

A sudden fire of determination flared in the earthman's steel grey eyes.

"There may be a way yet to stop him, my princess, and save our people—"

A weird, bold plan had formulated itself in John Carter's mind. He was accustomed to acting quickly on sudden impulse. Now he ordered his malagor down close over Tars Tarkas's head.

Although he knew the battle was hopeless, the green man was fighting furiously on his great thoat.

"Call your men back to the mountains," shouted Carter to his old friend. "Hide out there and reorganize—wait for my return!"

THE next half hour found John Carter and the girl beside Kantos Kan's flagship. The great Helium Fleet had once more retreated over the mountains to take stock of its losses and re-form for a new attack.

Every ship's captain must have known the futility of further battle against this indomitable element; yet they were all willing to fight to the last for their nation and for their princess, who had so recently been rescued.

After the earthman and the girl boarded the flagship, they freed the great malagor that had so faithfully served them. Kantos Kan joyously greeted the princess on bended knee and then welcomed his old friend.

"To know you two are safe again is a pleasure that even outweighs the great sadness of seeing our City of Helium fall into the enemy's hands," stated Kantos Kan sincerely.

"We have not lost yet, Kantos Kan," said the earthman. "I have a plan that might save us—I'll need ten of your largest planes manned by only a minimum crew."

"I'll wire orders for them to break formation and assemble beside the flagship immediately," replied Kantos Kan, turning to an orderly.

"Just a minute," added Carter. "I'll want each plane equipped with *two hundred parachutes!*"

"Two hundred parachutes?" echoed the orderly. "Yes, sir!"

Almost immediately there were ten large aircraft, empty troop ships, drifting in single file formation beside Kantos Kan's flagship. Each had a minimum crew of ten men and two hundred parachutes, two thousand parachutes in all!

Just before he boarded the leading ship, John Carter spoke to Kantos Kan.

"Keep your fleet intact," he said, "until I return. Stay near Helium and protect the city as best you can. I'll be back by dawn."

"But that monster," groaned Kantos Kan. "Look at him—we must do something to save Helium."

THE enormous creature, standing one hundred and thirty feet tall, dressed in his ill-fitting, baggy tunic, was tossing boulders and bombs into Helium, his every action dictated through short wave by Pew Mogel, who sat in the armored howdah atop the giant's head.

John Carter laid his hand on Kantos Kan's shoulder.

"Don't waste further ship and men uselessly in fighting the creature," he warned; "and trust me, my friend. Do as I say—at least until dawn!"

John Carter took Dejah Thoris's hand in his and kissed it.

"Goodbye, my chieftain," she whispered, tears filling her eyes.

"You'll be safer here with Kantos Kan, Dejah Thoris," spoke the earthman; and then, "Goodbye, my princess," he called and vaulted lightly over the

craft's rail to the deck of the troop ship alongside. It pained him to leave Dejah Thoris; yet he knew she was in safe hands.

Ten minutes later, Dejah Thoris and Kantos Kan watched the ten speedy craft disappear into the distant haze.

When John Carter had gone, Kantos Kan unfurled Dejah Thoris's personal colors beside the nation's flag; so that all Helium would know that their princess had been found safe and the people be heartened by her close presence.

During his absence, Kantos Kan and Tars Tarkas followed the earthman's orders, refraining from throwing away their forces in hopeless battle. As a result, Pew Mogel's fighters had moved closer and closer to Helium; while Pew Mogel himself was even now preparing Joog to lead the final assault upon the fortressed city.

Exactly twenty-four hours later, John Carter's ten ships returned.

As he approached Helium, the earthman took in the situation at a glance. He had feared that he would be too late, for his secret mission had occupied more precious time than he had anticipated.

But now he sighed with relief. There was still time to put into execution his bold plan, the plan upon which rested the fate of a nation.

CHAPTER XI

A Daring Plan

FEARING that Pew Mogel might somehow intercept any shortwave signal to Kantos Kan, John Carter sought out the flagship and hove to alongside it.

The troop ships that had accompanied him on his secret mission were strung out behind their leader.

Their captains awaited the next orders of this remarkable man from another world. In the last twenty-four hours they had seen John Carter accomplish a task that no Martian would have even dreamed of attempting.

The next few hours would determine the success or failure of a plan so fantastic that the earthman himself had half-smiled at its contemplation.

Even his old friend, Kantos Kan, shook his head sadly when John Carter explained his intentions a few minutes later in the cabin of the flagship.

"I'm afraid it's no use, John Carter," he said. "Even though your plan is most ingeniously conceived, it will avail naught against that horrible monstrosity.

"Helium is doomed, and although we shall all fight until the last to save her, it can do no good."

As he talked, Kantos Kan was looking down at Helium far below. Joog the giant could be seen on the plain hurling great boulders into the city.

Why Pew Mogel had not ordered the giant into the city itself by this time, Carter could not understand—unless it was because Pew Mogel actually enjoyed watching the destructive effect of the boulders as they crashed into the buildings of Helium.

Actually, Joog, however frightful in appearance, could best serve his master's purpose by biding his time, for he was doing more damage at present than he could possibly accomplish within the city itself.

But it was only a matter of time before Pew Mogel would order a general attack upon the city.

Then his entrenched forces would dash in, scaling the walls and crashing the gates. Overhead would swoop the supporting apes on their speedy mounts, bringing death and destruction from the air.

And finally Joog would come, adding the final coup to Pew Mogel's victory.

The horrible carnage that would then fall upon his people made Kantos Kan shudder.

"There is no time to lose, Kantos Kan," spoke the earthman. "I must have your assurance that you will see that my orders are followed to the letter."

Kantos Kan looked at the earthman for some time before he spoke.

"You have my word, John Carter," he said, "even though I know it will mean your death, for no man, not even you, can accomplish what you plan to do!"

"Good!" cried the earthman. "I shall leave immediately; and when you see the giant raise and lower his arm three times, that will be your signal to carry out my orders!"

JUST before he left the flagship, John Carter knocked at Dejah Thoris's cabin door.

"Come," he heard her reply from within. As he threw open the door, he saw Dejah Thoris seated at a table. She had just flicked off the visiscreen upon which she had caught the vision of Kantos Kan. The girl rose, tears filling her eyes.

"Do not leave again, John Carter," she pleaded. "Kantos Kan has just told me of your rash plan—it cannot possibly succeed, and you will only be sacrificing yourself uselessly. Stay with me, my chieftain, and we shall die together!"

John Carter strode across the room and took his princess in his arms—perhaps for the last time. She pillowed her head on his broad chest and cried softly. He held her close for a brief moment before he spoke.

"Upon Mars," he said, "I have found a free and kindly people whose civilization I have learned to cherish. Their princess is the woman I love.

"She and her people to whom she belongs are in grave danger. While there is even a slight chance for me to save you and Helium from the terrible catastrophe that threatens all Mars, I must act."

Dejah Thoris straightened a little at his words and smiled bravely as she looked up at him.

"I'm sorry, my chieftain," she whispered. "For a minute, my love for you made me forget that I belong also to my people. If there is any chance of saving them, I would be horribly selfish to detain you; so go now and remember, if you die the heart of Dejah Thoris dies with you!"

A moment later John Carter was seated behind the controls of the fastest, one-man airship in the entire Helium Navy.

He waved farewell to the two forlorn figures who stood at the rail of the flagship.

Then he opened wide the throttle of the quiet, radium engine. He could feel the little craft shudder for an instant as it gained speed. The earthman pointed its nose upward and rose far above the battleground.

Then he nosed over and dove down. The wind whistled shrilly off the craft's trim lines as its increased momentum sped it, comet-like, downward—straight toward the giant!

CHAPTER XII

The Fate of a Nation

NEITHER Pew Mogel nor the giant Joog had yet seen the lone craft diving toward them from overhead. Pew Mogel, seated inside the armored howdah that was attached to Joog's enormous helmet, was issuing attack

orders to his troops by shortwave.

A strip of glass, about three feet wide, completely encircled the howdah, enabling Pew Mogel to obtain complete, unrestricted vision of his fighting forces below.

Perhaps if Pew Mogel had looked up through the circular glass skylight in the dome of his steel shelter, he would have seen the earthman's speedy little craft streaking down on him from above.

John Carter was banking his life, that of the woman he loved and the survival of Helium upon the hope that Pew Mogel would *not* look up.

John Carter was driving his little craft with bullet speed—straight toward that circular opening on top of Pew Mogel's sanctuary.

Joog was standing still now, shoulders hunched forward. Pew Mogel had ordered him to be quiet while he completed his last-minute command to his troops.

The giant was on the plain between the mountains and the city. Not until he was five hundred feet above the little round window did Carter pull back on the throttle.

He had gained his great height to avoid discovery by Pew Mogel. His speed was for the same purpose.

Now, if he were to come out alive himself, he must slow down his hurtling craft. That impact must occur at exactly the right speed.

If he made the crash too fast, he might succeed only in killing himself, with no assurance that Pew Mogel had died with him.

On the other hand, if the speed of his ship were too slow it would never crash through the tough glass that covered the opening. In that case, his crippled plane would bounce harmlessly off the howdah and carry Carter to his death on the battlefield below.

One hundred feet over the window!

He shut off the motor, a quick glance at the speedometer—too fast for the impact!

His hands flew over the instrument panel. He jerked back on three levers. Three little parachutes whipped out behind the craft. There was a tug on the plane as its speed slowed down.

Then the ship's nose crashed against the little window!

THERE was a crunch of steel, a splinter of wood, as the ship's nose collapsed; then a clatter of glass that ended in a dull, trembling thud as the craft bore through the window and lodged part way into the floor of Pew Mogel's compartment.

The tail of the craft was protruding out of the top of the howdah, but the craft's door was inside the compartment.

John Carter sprang from his ship, his blade gleaming in his hand.

Pew Mogel was still spinning around crazily in his revolving chair from the tremendous impact. His earphones and attached microphone, with which he had directed Joog's actions as well as his troop formations, had been knocked off his head and lay on the floor at his feet.

When his foolish spin finally stopped, Pew Mogel remained seated. He stared incredulously at the earthman.

His small, lidless eyes bulged. He opened his crooked mouth several times to speak. Now his twisted fingers worked spasmodically.

"Draw your sword, Pew Mogel!" spoke the earthman so low that Pew Mogel could hardly hear the words.

The synthetic man made no move to obey.

"You're dead!" he finally croaked. It was like the man were trying to convince himself that what he saw confronting him with naked sword was only an ill-begotten hallucination. So hard,

in fact, did Pew Mogel continue to stare that his left eye behaved as Carter had seen it do once before in Korvas when the creature was excited.

It popped out of its socket and hung down on his cheek.

"Quickly, Pew Mogel, draw your weapon—I have no time to waste!"

Carter could feel the giant below him growing restless, shifting uneasily on his enormous feet. Apparently he did not yet suspect the change of masters in the howdah strapped to his helmet; yet he had jumped perceptibly when Carter's craft had torn into his master's sanctuary.

Carter reached down and picked up the microphone on the floor.

"Raise your arm," he shouted into the mouthpiece.

There was a pause; then the giant raised his right arm high over his head.

"Lower arm," Carter commanded again. The giant obeyed.

Twice more, Carter gave the same command and the giant obeyed each time. The earthman half smiled. He knew Kantos Kan had seen the signal and would follow the orders he had given him earlier.

Now Pew Mogel's hand suddenly shot down to his side. It started back up with a radium gun.

There was a blinding flash as he pulled the trigger; then the gun flew miraculously from his hand.

Carter had leaped to one side. His sword had crashed against the weapon knocking it from Pew Mogel's grasp.

Now the man was forced to draw his sword.

THERE, on top of the giant's head, fighting furiously with a synthetic man of Mars, John Carter found himself in one of the weirdest predicaments of his adventurous life.

Pew Mogel was no mean swordsman. In fact, so furious was his first attack that he had the earthman backing around the room hard-pressed to parry the swift torrent of blows that were aimed indescriminately at every inch of his body from head to toe.

It was a ghastly sensation, fighting with a man whose eye hung down the side of his face. Pew Mogel had forgotten that it had popped out. The synthetic man could see equally well with either eye.

Now Pew Mogel had worked the earthman over to the window. Just for an instant he glanced out.

An exclamation of surprise escaped his lips. .

CHAPTER XIII

Panic

JOHN CARTER'S eyes followed those of Pew Mogel. What he saw made him smile, renewed hope surging over him.

"Look, Pew Mogel!" he cried. "Your flying army is disbanding!"

The thousands of malagors that had littered the sky with their hairy riders were croaking hoarsely as they scattered in all directions. The apes astride their backs were unable to control their wild fright. The birds were pitching off their riders in wholesale lots, as their great wings flapped furiously to escape that which had suddenly appeared in the sky among them.

The cause of their wild flight was immediately apparent.

The air was filled with parachutes!—and dangling from each falling parachute was a three-legged Martian rat—every Martian bird's hereditary foe!

In the quick glance that he took, Carter could see the creatures tumbling out of the troop ships into which he had loaded them during his absence of the

last twenty-four hours.

His orders were being followed implicitly.

The rats would soon be landing among Pew Mogel's entrenched troops.

Now, however, John Carter's attention returned to his own immediate peril.

Pew Mogel swung viciously at the earthman. The blade nicked his shoulder, the blood flowed down his bronzed arm.

Carter stole another glance down. Those rats would need support when they landed in the trenches.

Good! Tars Tarkas's green warriors were again racing out of the hills, unhindered now by scathing fire from an enemy above.

True, the rats when they landed would attack anything in their path; but the green Tharks were mounted on fleet thoats—the apes had no mounts. No malagor would stay within sight of its most hated enemy.

Pew Mogel was backing up now once more near the window. Out of the corner of his eye, Carter caught sight of Kantos Kan's air fleet zooming down toward Pew Mogel's ape legions far below.

Pew Mogel suddenly reached down with his free hand.

His fingers clutched the microphone that Carter had dropped when Pew Mogel had first rushed at him.

Now the creature held it to his lips and before the earthman could prevent he shouted into it.

"Joog!" he cried. "Kill! Kill! Kill!"

The next second, John Carter's blade had severed Pew Mogel's head from his shoulders.

THE earthman dived for the microphone as it fell from the creature's hands; but he was met by Pew Mogel's headless body as it lunged blindly around the room still wielding its gleaming weapon.

Pew Mogel's head rolled about the floor, shrieking wildly as Joog charged forward to obey his master's last command to kill!

Joog's head jerked back and forth with each enormous stride. John Carter was hurled roughly about the narrow compartment with each step.

Pew Mogel's headless body floundered across the floor, still striking out madly with the sword in its hand.

"You can't kill me. You can't kill me," shrieked Pew Mogel's head, as it bounced about. "I am Ras Thavas' synthetic man. I never die. I never die!"

The narrow entrance door to the howdah had flopped open as some flying object hit against its bolt.

Pew Mogel's body walked vacantly through the opening and went hurtling down to the ground far below.

Pew Mogel's head saw and shrieked in dismay; then Carter managed to grab it by the ear and hurl the head out after the body.

He could hear the thing shrieking all the way down; then its cries ceased suddenly.

Joog was now fighting furiously with the weapon he had just uprooted.

"I kill! I kill!" he bellowed as he smacked the huge club against the Helium planes as they drove down over the trenches.

Although the howdah was rocking violently, Carter clung to the window. He could see the rats landing now by the scores, hurling themselves viciously at the apes in the trenches.

And Tars Tarkas' green warriors were there now, also. They were fighting gloriously beside their great, four-armed leader.

But Joog's mighty club was mowing

down a hundred fighters at a time as he swept it close above the ground.

Joog had to be stopped somehow!

John Carter dove for the microphone that was sliding around the floor. He missed it, dove again. This time his fingers held it.

"Joog—stop! Stop!" Carter shouted into the microphone. Panting and growling, the great creature ceased his ruthless slaughter. He stood hunched over, the sullen, glaring hatred slowly dying away in his eyes, as the battle continued to rage at his feet.

THE apes were now completely disbanded. They broke over the trenches and ran toward the mountains, pursued by the vicious, snarling rats and the green warriors of Tars Tarkas.

John Carter could see Kantos Kan's flagship hovering near Joog's head.

Fearing that Joog might aim an irritated blow at the craft with its precious cargo, the earthman signalled the ship to remain aloof.

Then his command once again rang into the microphone.

"Joog, lie down. Lie down!"

Like some tired beast of prey, Joog settled down on the ground amid the bodies of those he had killed.

John Carter leaped out of the howdah onto the ground. He still retained hold of the microphone that was tuned to the shortwave receiving set in Joog's ear.

"Joog!" shouted Carter again. "Go to Korvas. Go to Korvas."

The monster glared at the earthman, not ten feet from his face, and snarled.

CHAPTER XIV

Adventure's End

ONCE again the earthman repeated his command to Joog the giant. Now the snarl faded from his lips and from the brute's chest came a sound not unlike a sigh as he rose to his feet once again.

Turning slowly, Joog ambled off across the plain toward Korvas.

It was not until ten minutes later after the Heliumite soldiers had stormed from their city and surrounded the earthman and their princess that John Carter, holding Dejah Thoris tightly in his arms, saw Joog's head disappear over the mountains in the distance.

"Why did you let him go, John Carter?" asked Tars Tarkas, as he wiped the blood from his blade on the hide of his sweating thoat.

"Yes, why," repeated Kantos Kan, "when you had him in your power?"

John Carter turned and surveyed the battlefield.

"All the death and destruction that has been caused here today was due not to Joog but to Pew Mogel," replied John Carter.

"Joog is harmless, now that his evil master is dead. Why add his death to all those others, even if we could have killed him—which I doubt?"

Kantos Kan was watching the rats disappear into the far mountains in pursuit of the great, lumbering apes.

"Tell me, John Carter," finally he said, a queer expression on his face, "how did you manage to capture those vicious rats, load them into those troop ships and even strap parachutes on them?"

John Carter smiled. "It was really simple," he said. "I had noticed in Korvas, when I was a prisoner in their underground city, that there was only one means of entrance to the cavern in which the rats live—a single tunnel that continued back for some distance before it branched, although there were openings in the ceiling far above; but they were out of reach.

"I led my men down into that tunnel

and we built a huge smoke fire with debris from the ground above. The natural draft carried the smoke into the cavern.

"The place became so filled with smoke that the rats passed out by the scores from lack of oxygen, for they couldn't get by the fire in the tunnel—their only means of escape. Later, we simply went in and dragged out as many as we needed to load into our troop ships."

"But the parachutes!" exclaimed Kantos Kan. "How did you manage to get those on their backs or keep them from tearing them off when the creatures finally became conscious?"

"They did not regain consciousness until the last minute," replied the earthman. "We kept the inside cabin of each troop ship filled with enough smoke to keep the rats unconscious all the way to Helium. We had plenty of time to attach the parachutes to their backs. The rats came to in midair after my men shoved them out of the ships."

John Carter nodded toward the disappearing creatures in the mountains. "They were very much alive and fighting mad when they hit the ground, as you saw," added the earthman. "They simply stepped out of their parachute harness when they landed, and leaped for anyone in sight.

"As for the malagors," he concluded, "they are birds—and birds on both earth and Mars have no love for snakes or rats. I knew those malagors would prefer other surroundings when they saw and smelled their natural enemies in the air around them!"

Dejah Thoris looked up at her chieftain and smiled.

"Was there ever such a man before?" she asked. "Could it be that all earthmen are like you?"

THAT night all Helium celebrated its victory. The streets of the city surged with laughing people. The mighty, green warriors of Thark mingled in common brotherhood with the fighting legions of Helium.

In the royal palace was staged a great feast in honor of John Carter's service to Helium.

Old Tardos Mors, the Jeddak, was so choked with feeling at the miraculous delivery of his city from the hands of their enemy and the safe return of his granddaughter that he was unable to speak for some time when he arose at the dining table to offer the kingdom's thanks to the earthman.

But when he finally spoke, his words were couched with the simple dignity of a great ruler. The intense gratitude of these people deeply touched the earthman's heart.

Later that night, John Carter and Dejah Thoris stood alone on a balcony overlooking the royal gardens.

The moons of Mars circled majestically across the heavens, causing the shadows of the distant mountains to roll and tumble in an ever-changing fantasy over the plain and the forest.

Even the shadows of the two people on the royal balcony slowly merged into one.

(Continued from page 7)

But your editors are pretty sure the first dirigible didn't go very far! If it went anywhere!

NOW we're a bit too far up in the air! Let's get down again.

Deep sea life depends on descending ocean currents. This is evidenced by the Black Sea, which has no life-giving currents such as those which aerate the ocean depths with vital oxygen. Thus, no life at all is to be found in its depths except for certain forms of bacteria.

DID you know that the Earth recently had a "new deal" birthday? Well, here's how. In two states, last September, Arkansas and Tennessee, our planet celebrated its 5,700 birthday anniversary. In most other states the earth can be most any age, determined by scientists and scientific methods, which would make it a few billion years old at least.

But in Arkansas and Tennessee, the earth will just have to be 5,700 years old! No more, no less. How come?

It so happens that some of our more erudite politicians decided that there was only one accurate earth chronology. They referred to the time table set up by the Archbishop Ussher, who, not very long ago, was asked the age of this here planet. Without hesitation he gave his famous reply that simply by adding Adam's 930 years to Enoch's 365 to Methuselah's 969, etc., one could easily obtain the exact date of the creation, or, the age of the earth.

The famous Dr. Robert A. Millikan has pointed out that barely fifty years ago the subject of evolution was hotly debated. Most "intelligent persons" knew that Archbishop Ussher's chronology was correct. These "scholars" thought so much of the theory that in Arkansas and Tennessee they passed laws barring all other chronologies. The laws are still in effect

So, in these states the world has to be 5,700 years old as of last September, 1940—and if it isn't, it most certainly will be breaking the law! As for you, take your pick

HAS scientific knowledge really advanced us to any *real* extent, mentally? If you think so, then how about this?

In the middle ages, animals were brought to trial for crimes they had committed. In Falaise, France, in 1386, a sow attacked a baby and ate part of its face and arm. Accordingly the sow was formally sentenced to have its snout and foreleg chopped off by the executioner. In 1389 a horse was sentenced to die because it had kicked a man to death. The punishments were intended to fit the crime, or the injuries.

The modern court is scarcely different. The most common case is that of a dog sentenced to death because of repeated attacks on humans. In the modern court the dog's extermination is ordered because he is dangerous, whereas in the middle ages, the dog was killed because he had consciously committed a crime and should therefore be punished on moral grounds in the same way as human malefactors.

ALL of which brings us to the end of another observatory session. We hope you've enjoyed the chat as much as we have. We'll be back next month with new observations of various import and unimport. Until then, thumbs up!

Rap

THE *Invisible* WHEEL OF DEATH

by DON WILCOX

What was the weird death that circled over the valley of the Draz-Kangs? Theban Hyko thought he knew and dared the spin of its awful wheel.

THEBAN HYKO'S white space ship zoomed down out of a blustery gray sky.

The lame old marshal of Frigio Port poked his head out of the top of his fur overcoat and hobbled across the snowy field to deliver a respectful salute.

Theban Hyko returned the salute, unmindful that the old marshal worshipped the very snow that he stepped out upon. Nor did he notice the glow of admiration in the faces of the mechanics who came out to take the ship over. In recent weeks every mechanic in the five planets—every ordinary citizen, for that matter—had heard of this bold gray-eyed young officer.

"It's great work you purgiers are doing," the old marshal beamed as they trudged through the snow. "You here on official business, maybe? Figure to find some Draz-Kang rats lurking 'round Frigio?"

Theban smiled absently. "The Draz-Kangs stick to the planet Bronze, thank goodness. They won't spread to Frigio if we can prevent it."

"If I was a purgier like you," the old marshal grunted, stepping ahead to open the snow-locked gate to the street, "I s'pose I'd want 'em all cornered, just the way you've got 'em. But if you was a marshal on a wintry outpost, like me, you'd wish some of 'em was hiding 'round here just so there'd be some action. Nothing ever happens here."

"Nothing?" Theban's thoughts were elsewhere. In spite of his recent successes the drive on the rebellious Draz-Kangs had had a serious setback—a setback that spelled tragedy for the officers devoted to the search—perhaps tragedy for the whole White Comet Union.

"Nothing," the old marshal repeated. "Nothing but training for the guardsmen. Of course, the space liners come through every *punto*. Now and then we git a tourist from one of the other four planets. Now and then a girl drops in to visit one of the guardsmen —like that black-haired one, for instance, that came in this very *punto*— with the hard-boiled hell-raising eyes —"

"The boys need some sociability," Theban commented absently. "It's a tough training period they let themselves in for when they enlist under the White Comet."

The two men paused in the shelter of a lunch-room doorway. Theban Hyko cast his eyes over the wintry village toward the barracks, spotted the row

Theban Hyko swung helplessly, trapped from above and below

of small cottages where the guardsmen lived.

"Come to see Ilando Ken, did ya?" the marshal asked. "Better drop in here and have some lunch with me first."

"No, thanks. I'll go right over and make a surprise call. I never warn my friends, because my time off is too uncertain. Ilando'll probably have some stew and coffee on, and all he'll have to do is add some water. By the way, how's he getting along?"

"Well, he's still sticking," the old marshal grunted. "That's about all you can say of any of the young guardsmen. Not to change the subject, sir, but I heard a rumor—"

"About Ilando Ken?" Theban spoke with a sharpness that betrayed a sensitive nerve.

"No, sir. About you purgiers."

"Well?"

"And I wondered—that is, I want you to tell me there's nothing to it - but I heard a whisper from a space pilot—"

Theban's lean sensitive face changed from an expression of defensiveness to one of deep pain, as if from a hidden wound.

"What did you hear?" he asked quietly.

"I heard that a space ship full of your fellow purgiers fell to the Draz-Kangs."

"It's true," Theban answered in a low voice, and for a moment he closed his eyes. "Some of the best comrades I ever hope to have went down in that ill-fated ship. You knew some of them yourself."

The old marshal's face grew white as Theban went over the names. His very world seemed to rock, for he had always thought of the purgiers as being invincible if not immune to the furies of the rebel Draz-Kangs.

"The low devilish rats!" the old patriot seethed. "They ought to be blown to hell, every last one of them! And they will be before *you* git through with 'em."

Theban drew a deep breath. The snow seemed to glance off his tightly set face.

"We may reach our limit," he said. "When you make a drive on rats you can't always get the very last rat. A few of them stick to their hideouts."

"And breed," the old marshal added wisely.

"The Draz-Kangs have got something — something we don't understand." Then changing the subject abruptly as he started off, Theban said, "So I'll find Ilando Ken okay?"

"He's sticking," and the marshal gave a final salute.

Sticking, was he? Well, he'd better stick. The White Comet Union took quick action on any enlisted man who didn't. For an instant Theban recalled the picture of seven deserters lined up against a wall—deserters *he* had run down.

The marshal's answer had gone to the heart of his innermost question. Purgier Theban Hyko knew that his young friend, whom he had persuaded to enlist as a guardsman, was being put to the hardest test of a lifetime. It's no easy job for a man—even a young man—to anchor himself down to solid loyalty *after he's had a first whirl of playing traitor.*

Theban's heavy boots plowed through the snow toward the guardsmen's cottages. It was a lucky *punto* for Ilando Ken when Theban rescued him from the clutches of that damned beautiful Draz-Kang girl and talked him into enlisting. Already Ilando had served a *kilopunto* of his training period. A bit of reward might be in order. . . .

THE dark-haired girl with the hell-raising eyes whom the old marshal had seen alight from a space liner, stood before the small mirror that hung in the combined living-room, bedroom, and dining room of Guardsman Ilando Ken's cottage.

With orange-tinted makeup she deepened the color of her cheeks and lips. She swung about angrily as Ilando came near and tried to take her by the arms.

"Keep your hands off me, can't you?"

Ilando Ken stared at her coldly beautiful face and the puzzlement in his own boyish countenance deepened.

"I don't understand you, Vida. You say you came here because you still love me—"

"Have you dyed your uniforms yet?" Vida asked icily, putting her makeup away with precise movements of her thin sensitive fingers. "Well, *have you?*"

"Vida, I've been thinking—"

"What?"

"I can't go through with it!" Ilando's fists were closed tightly and the cuffs of his regulation blue shirt trembled.

Vida exploded with fury. "Why, you cur! You can't turn coat that way—not on *me! My* plans are set, and you're a part of them! Hurry up and dye those uniforms. I tell you the Draz-Kangs would tear you to pieces if I brought you into headquarters wearing your White Comet monkey suit—"

"Vida, you've got to listen to me." Ilando's white lips trembled. He watched the girl as she marched across the room to don her fur overcoat. "Vida, please listen— Where are you going, Vida?"

"Back to the hotel, to wait till you come to your senses."

"You know I'm mad about you," the young guardsman pleaded with all the anguish of a madman. "But if I *desert*—"

"I tell you you won't be caught."

"But being caught isn't all. It's more than betraying the Union. It's betraying a friend—"

The furious girl flopped into a chair, slapped the arms of it, and shouted in a mocking voice. "Well—I'll—be—damned!"

"If it wasn't that he *believes* in me—but he does! He's staked me—"

"Staked you to *what!* To two long *kilopuntos** of freezing on this godforsaken iceberg—"

"I can't let him down—"

"You're scared!"

"I'm not!"

"Just because he chases deserters and carries a flame gun and has some extra stripes on his uniform, you think you've got to knuckle down—"

"It's not a matter of knuckling down. It's a matter of measuring up!"

"Well, if this isn't a pretty mess of soup!" The girl jerked a slipper off her foot and slammed it at the wall. She breathed like a volcano.

ILANDO, open-mouthed, open-eyed, restrained himself from pouring out any more of the torture that burned through him. He was halted momentarily by seeing Vida in a new light, and for an instant he had to stop and ask himself how it was that he had been swept off his feet by her.

* For the sake of uniformity, all the planets of the White Comet Union employ the same time system based upon the *punto,* or rotation time of the Planet Bronze. Hence, the *punto* corresponds to the Earth's day; the *decipunto,* or simply *deci* (tenth of a *punto)* is the major division of time within a Bronze day, corresponding roughly to our hour though somewhat longer. Other units of time follow in regular metric order. Thus, the *centi-millipunto* is a very brief unit of time, a hundred-thousandth part of a *punto,* or approximately equal to our second. The audible ticking of Theban Hyko's watch coincided with the passing of successive *centi-millipuntos.*—Ed.

The girl, sensing that she had played her fury to the limit, cooled to her normal highly-poised impenetrability. She was not afraid of losing Ilando Ken. She was too practiced in the arts of converting the "right persons" into the cause of the Draz-Kangs for that. This young guardsman was putty in her hands.

And he was valuable.

When she had first sought him out it was because he was a promising young clerk in a very important bank. Any road to money, the Draz-Kangs well knew, was a road back to power.

Then that dashing purgier named Theban Hyko had crashed into the scene and she had had to play cautious. But she had quickly discovered that the value of her connection with Ilando Ken was redoubled. For Ken and Hyko became fast friends; it was one of those curious friendships between hero and hero-worshipper, between the competent and the incompetent, between the solid doer and the unsteady dreamer.

Only once had Vida seen Theban Hyko, but she knew well enough that of all the relentless purgiers he was the key man. If he were only out of the way—

"Ilando." The girl spoke with a hurt, passionate voice. She held out her hand to him. "Ilando, I've loved you so. All those lonely endless stretches of time that I've waited, longing for the time you'd come down to the planet Bronze, to our headquarters. You've no idea how I've dreamed—"

"Yes?" Sympathy and devotion sprang back into Ilando's boyish face. He knew about the endless *puntos* of longing and dreaming too.

"Won't you come — now? You needn't be afraid. Once you've joined the Draz-Kangs you'll feel differently about everything."

The girl talked on. Her beauty, mysterious and unfathomable, cast a spell. Ilando began to understand; he saw that his enlistment was a mistake. Anything that could stand in the way of his love for Vida must be wrong.

"We'd better go quickly," he said.

"Go and dye your uniforms."

"Yes—at once."

The girl followed him into the little kitchen, watched over his work. He soused the clothes into the black liquid.

A knock sounded at the door.

A hearty voice called from outside.

"Ilando! Ilando, are you in there? This is Theban."

CHAPTER II

A Traitor Acts

"MY stars!" Theban exclaimed as he pumped Ilando's hand, "You must have spilled the ink."

Ilando nodded nervously, shifting his eyes around the room against his will, chilled with the fear that some evidence of Vida's presence would certainly crop up. No, nothing was in sight. She'd remembered to pick up the slipper, she'd grabbed her overcoat, she'd closed the closet door tightly. There was nothing to worry about.

Nevertheless, Theban demanded to know what he *was* worried about, and whether he was sick, he looked so pale, and why he was so long answering the door if he wasn't either sick or asleep. But all of Theban's talk was meant for hearty good-natured jollying, and the only real trouble, as far as Theban could tell, was that Ilando was slow to snap out of it and rejoice, in his usual manner, over the blessing of a surprise visit.

For half an hour they talked and ate and smoked. Ilando was not talkative. The shadow that continually hovered

over his end of the conversation was puzzling to Theban. Theban wanted to be certain there were no unseen pitfalls before he waded into the real purpose of his visit.

Failing to break through his friend's guard, Theban changed tactics and came to the point.

"How would you like to get away from this outpost for a time?"

Ilando's body stiffened. "Why?"

The response was hardly what Theban expected. The eagerness for action of most guardsmen stationed at outposts was well known by Theban. And he knew Ilando well enough to believe that too much isolation here might easily be as damaging as a term in prison.

"Aren't you tired of it here? Wouldn't you like to get away?"

Ilando's eyes flicked suspiciously. "What are you driving at?"

"Just this. You've come through a difficult transition; and I know how hard it must be for you, especially you, because you've had more to fight than most of the young guardsmen. If you don't mind my mentioning it, you were jerked back rather suddenly from the brink of danger. You've played the game like a true patriot. I want to reward you."

"How?" Only Ilando's breath said the word; the voice was temporarily gone.

"By having you temporarily released from training and assigned to me as a special assistant. . . . Well, what about it? Would you care for a whirl of action for a change?"

Theban couldn't understand why the silence should hang so heavy. When Ilando answered it was to say that Theban mustn't put so much trust and faith in him.

"It's not right," Ilando said nervously. "You've got to live your life, and I mine. You can't go on this way, believing in me and trying to make something out of me—"

"You're talking nonsense," Theban interrupted, trying not to notice the other's nervousness, which Theban interpreted as a sure sign that his friend needed a respite from routine. "It's simply a question of whether you'd care for the sort of work we'd have to do—scouting, tracing suspects, holding an air-tight ring around the Draz-Kang nest. . . ."

AND with that Theban fell into a monolog of experiences. He hinted at further plans for checking the Draz-Kang activities, which, he said, were always in danger of spreading. He assured Ilando that there would be danger aplenty; he told what little he knew of the quick mysterious finish that had come to a space ship load of his fellow purgiers.

"But you know as well as I do how the Draz-Kangs work. The papers are full of it. You've had a glimpse of it first hand. (Why does he keep looking away from me?) Some people call them human rats. To me they're snakes. Do you ever stop to think how lucky you are—"

Theban caught himself with an instant's fear that he might play his hand too bold; but he had started and he plunged on—

"—How lucky you are that I tore you away from that little she-devil of a Draz-Kang brunette? She was poison, Ilando. She never loved you. You can see it now yourself. She was scheming—"

Ilando breathed tensely through his teeth; his fists clenched into hard knots.

"Let me tell you something, Ilando," Theban's tone dug deep. "The Draz-Kangs are dragging for new blood. They've got men stationed at the crossroads of the space routes looking for

recruits. Any stranger who comes to them in a black uniform they'll receive."

Ilando breathed hard. He crumpled an unlighted cigaret in his fingers.

"The black uniform, to them, is a symbol of allegiance, the same as our pledge of allegiance to the White Comet flag that you took when you joined the guardsmen."

Theban paced the floor as he talked. His gleaming boots turned with military precision as he swung from one corner of the room to the other.

"I don't know whether the Draz-Kangs think they can stage a swift bloody revolution. I don't know what happens to the White Comet citizens who turn coat and join. *We* never hear of them again—because, as you know, we've never got into the Draz-Kangs' central nest. . . .

"But I had the pleasure a few *puntos* ago of tracing down a deserter—"

Ilando's eyelids flicked and then froze.

"—a deserter—" Theban emphasized the word by slamming his fist back against a door that stood behind him—it chanced to be the closet door, "a damned deserter who had been a guardsman on the planet Bronze, who had dyed his uniform black—"

Ilando's stained hands jerked involuntarily. Theban stopped in his tracks and stared. He looked from Ilando's hands to his eyes and back again; but the hands slipped from view to thrust deep into the pockets of Ilando's uniform trousers.

Theban Hyko took a long slow breath. The color came and went in his face. Then he spoke abruptly and with decision.

"I'm in no mood to talk today. I've made my proposition. I'll have more to say if you accept."

Theban swung into his blue and white regulation overcoat, donned his military cap. He glanced out at the thickening snowstorm.

"I'll make the necessary arrangements with your officers for your leave at once. If you decide to accept, I'll expect you to be waiting in my space ship. I'll take off in exactly two *decipuntos*. Here's a key."

Theban tossed it over his shoulder without looking back. He marched out, closed the door securely behind him, trudged along the snowbound avenue of guardsmen's cottages.

EXACTLY two *decipuntos* later the purgier made tracks toward the blotch of white that he knew was his waiting space ship. His heart beat fast. There were tracks ahead of him, drifted nearly full but still discernible.

The sight of those tracks filled him with surging emotions. They must be Ilando's tracks, seeing that they came from the wrong direction to have been either the marshal's or the mechanics'. Theban quickened his step.

He entered the ship briskly, caught a glimpse of Ilando's overcoated figure standing statue-like at the farther end of the companionway, turned instantly to the controls.

His hands worked deftly at the levers. The familiar feel of well-cushioned acceleration shot a thrill through his body; and with it came a thrill of psychological victory. This takeoff, he believed, would be the landmark in the making of Ilando Ken.

Theban opened the motors until he attained his normal flying speed. The snowstorms of Frigio passed out of his mind. The black void was ahead—the open planet-filled skies. And somewhere beyond waited a new adventure on the planet Bronze.

"We've got a hard nut to crack," Theban remarked as he set his controls

for a B-line through space. Ilando came down toward him with a calm sure step. "If there's any way to get into that Draz-Kang nest we're going to find it."

"Just what are your plans?" Ilando asked tersely.

"Haven't any." Theban laughed lightly. "I'm stumped. I've pondered over the thing. Pondering is about as far as I can get."

"Perhaps the other purgiers have plans?"

"We're all playing cautious since that recent tragedy. Maybe you've heard—a ship load of purgiers was lost. There's only one possible conclusion out of that. The dead crater where the Draz-Kangs' central nest is located must be a death trap."

"How'd you know it was a *crater?*" Ilando asked sharply.

Theban shot a glance at his companion, still overcoated. Ilando's manner was still far from reassuring. He fired questions as if he might have been a paid prober.

"Several evidences have pointed to the crater," Theban replied. "The last word radioed to us from the ship that was lost was that they were descending into the dead crater of an ancient volcano in the Bronze mountains—*in direct pursuit of a Draz-Kang space ship.*"

THERE was a silence. Then Theban turned the question about.

"Did *you* know the nest was in a crater?"

"I've never seen the place," Ilando replied.

The answer was an evasion. Theban finished checking the positions of instruments and turned to Ilando with a steady challenging eye.

"Ilando, I've never asked you before. But if we're going to work together we've got to meet on an open ground. Don't you think it's time you told me how deeply you got into that Draz-Kang mess and just how much you know about it?"

Ilando's eyes shifted to some point across the room back of Theban. He brought his hands up to the collars of his overcoat. Perhaps the discomfort of the moment prompted him to shed it—

The startling sound of footsteps from somewhere behind him caused Theban to whirl. The room spun across Theban's eyes. He caught the gleam of an upraised club—a bottle—a silver swish through the air—

The blow glanced across Theban's skull. He plunged full force at the figure who had struck, crushed the lithe form back against the wall, swung to strike—

Within inches of its mark the lightning punch was pulled. Theban Hyko glared into the cold, tense, and devastatingly beautiful face of Vida.

He drew back a trifle, and his lean strong face showed plainly enough that he was disappointed he hadn't been able to follow through with some skull-cracking punches. He glanced at the bottle in the girl's flexed thin fingers. His glare shot back to her drilling black eyes, he caught the hint of a sneer on her seductive orange-painted lips.

Then the girl's sneer vanished, she glanced at her shoulder—Theban was not aware until that moment that she was still nailed to the wall under the pressure of his left arm—and her eyes returned with an incomprehensible expression to meet his strong gaze. Theban made no move to release her.

"What's the game?"

The girl did not answer.

"Speak up! What's the game?"

The response that came was the nervous voice of Ilando back of him.

"You're covered, Theban! We're taking over!"

Only an iota of restraint kept Theban from whirling back; only the knowledge that Ilando was too nervous to be trusted with a gun, whether he willed to kill or not.

Quickly as it all had happened, it all made sense to Theban. There was no doubt how the land lay now, no need to question motives. Theban turned slowly, his hands upraised. He saw that Ilando was wearing a White Comet uniform dyed black.

"I hate like hell to harm you, Theban," Ilando's words poured forth from nervous lips. Suddenly all the tenseness of his recent silence seemed to let go in talk. "I tried to tell you you couldn't make me over. I tried to tell you not to trust me—*don't come any closer!* I've made my decision. I'm full of deceit and I know it. You can't make a man like me honest, Theban, by just believing in him. I haven't got the stuff you tried to tell me I had—but I've got the stuff to go through *this* deal—and we're going through with it—Vida and me! And don't you ever try to search me down—*stand back or I'll—*"

Theban would never know whether Ilando finished that threat. For Theban's lights went out. The solid blow at the side of his head made him reel and crash to the floor.

Vida put down the bottle and she and Ilando dragged the limp athletic form into a small room that could be securely locked.

CHAPTER III

Death—And Rabbits

THEBAN HYKO mopped the dust from his eyes and gazed out across the vast crater that stretched before him. The glimpses he had had during the last few weary miles of trudging had led him to believe the crater was filled with a lake of yellow water, so smooth was the floor of yellow soil.

He hurled a stone out over the edge, it fell with a solid earthy thud. As soon as he had rested a bit he would descend over the edge. Would his head never stop aching?

All the way over those endless miles he had thanked his lucky stars he was alive. He had thanked Ilando Ken. For he had no delusions about the treatment Vida would have meted out to him. Ilando must have somehow gotten past her. Ilando! The very name stabbed him. Can anything be more nauseating than to have your proudest faith and trust sell you out?

But Theban had returned to consciousness to find himself lying on a grassy plateau; and that favor, he knew, was an expression of Ilando's last spark of fair play.

Theban had recognized the Bronze mountains at once. He had reached for his map only to find it gone. But a single distant landmark had given him his bearings. And his memory of the map had led him to choose the long hard unbeaten path over the mountaintops to that mysterious unfathomed magnet—the dead crater.

Now he removed the scarred and tattered bags of leather that had once been his military boots, and lay down on his stomach; he propped his head in his hands and studied the vast circular depression. The odor of lava dust tinged the air.

He focused on the island in the center—it would have been an island had that level floor been water instead of soil. Perhaps the occasional black splotches were water.

On the island was the only vegetation within the crater; and there was enough

of it to hide whatever else of interest there might be in that vicinity.

One object, however, struck his curiosity. Perhaps it was the black tip of a spire or a tower; perhaps it was only the top of a dead tree trunk a few feet taller than the other trees.

But his eyes were blurry from weariness; and his field glasses, like his gun and his map, had been removed from him before he had been set free.

He gazed downward. His eyes rested idly on a dead hawk that lay on a projecting rock halfway down the crater wall.

He couldn't get Ilando out of his mind. Perhaps he would never know his friend's fate. He tried to tell himself that the girl's love might have had a grain of sincerity, otherwise Ilando couldn't have been fool enough to—

It was no use. Big black letters loomed before his dizzy eyes—letters that spelled COWARD and TRAITOR and DESERTER—black letters that were formed out of black uniforms—uniforms that contained men — men with white faces—men that leaped and danced before the firing squad—leaped and danced in their black uniforms that made black letters that spelled DESERTER! And every man was Ilando Ken. . . .

THEBAN lapsed into troubled sleep. Once he was half awakened by a roar in the sky. But he was almost too deep in the stupor of fatigue to come to his senses.

He forced his eyes open only to find himself lost in the darkness of night. A cool mountain breeze swept over him. He looked up into the black sky toward the roar that had disturbed him.

He saw the rocket ship. It circled about as if to land. Where was the insignia—the White Comet? There was none. But that was not a White Comet ship; it was the wrong design. Why should he care what happened to it?

Suddenly it swooped down. Its headlights and rocket fire were swallowed up in the island. Everything was still. He could sleep again. His senses turned off; he slept.

He awoke with a start. The new *punto's* light was dawning. It was hot on the back of his neck.

He sprang up. His restored muscles responded instantly. His vibrant body thrilled with new life from his long rest.

Then a surge of horror leaped through him. He had seen a space ship in the night! The purgiers were due to attack this spot sometime soon. How soon? What *punto* was this? Had he dreamed this ship?

No, it couldn't have been a dream. His memory of it was too vivid. The picture clung in his mind like a photograph. He remembered the very angle at which the counter motors had fired.

Then he gave a relieved sigh—that memory reassured him. It had not been a White Comet ship! Fully awake now, he was sure of that fact. No, those long tilting blades of light from the counter motors were proof—it had been a Draz-Kang ship, stealing back to home base under the cover of darkness.

His subconscious mind must have known that to let him sleep on. If it had been a White Comet ship—another load of purgiers—what mysterious fate might have struck them down?

Theban's flexed body hovered over the brink of the crater wall. Suddenly the dead hawk hanging on the bit of ledge fifty feet below him took on a new and terrifying significance.

And so did that dead rabbit a little farther below! There was still another carcass beyond -the decaying skeleton of a mountain wolf.

Somewhere between Theban and

those gruesome relics of past life there must hover *an invisible death.*

Where was it? What was it? Theban scrambled into his tattered boots and ran along the circling edge of the cliff tops.

It came back to him now that throughout his long mountain hike he had scared up rabbits—tens of thousands of them. Now he saw literally hundreds of them lying dead and in all states of decay, lined along the bottom of the crater cliff. Yes, there must be a widespreading layer of some death-dealing force—perhaps a *vast invisible wheel of death* that fitted within the circular crater like a lid.

He stopped, crouched. A Bronze-mountain buzzard swooped down toward the carcass of a rabbit. Would it reach its goal? Or would it foul up against some lurking poisonous gas? Or some invisible ray? Theban held his breath.

The buzzard coasted down—*all the way*—to the foot of the crater wall two hundred feet below.

It feasted; it winged upward—*unharmed.*

Then down it sailed again toward the same carcass—

Instantly, not fifty feet below Theban, the swooping buzzard went limp, plummeted to the ground, fell in a formless heap—dead!

THEBAN recoiled. Instinctively he glanced at the sky. Some *punto* soon—how soon he did not know, for he had lost all track of time—a White Comet space ship would swoop down to explore this region—to search for the fate of an earlier expedition—perhaps to share it!

But there was something inconsistent here, and that something pounded back and forth with the terror that beat through Theban's brain.

Sometimes the death was there, sometimes it was gone.

Did it come and go like the tides? Did it coincide with the breathing of some impossible monster — or the rhythmic explosions of some unseen fountain of gas? Or did it whirl past like the light of a revolving beacon?

A revolving beacon! Theban's eyes shot across to the little verdant island three or four miles within the floor of blotched yellow soil. His gaze rested on the dot of black that reared like a giant head above the tree tops. That tower top, if such it was, appeared to be at about the same level, at which the buzzard had met the mysterious instantaneous death. Still, at that distance he could not judge; he was only conjecturing. He wished he had his field glasses.

But there was no time for wishing. Theban went to work.

He snared three live rabbits, brought them back to the crater's edge, tied them to a bush.

He gathered some long grass, wove a stout lithe rope.

He tied a kicking rabbit to the end of the rope, let it down over the crater's edge slowly. Fifty feet down it kicked its last.

Again he fed out rope and the second rabbit descended over the overhanging ledge. This time death missed on the descent; but as he pulled the rabbit upward it went limp with death—*at approximately the same level*—some fifty feet below him.

"I'll be damned," he muttered aloud. "Sometimes death strikes, sometimes it misses."

"It don't miss for long," a pleasant voice from behind him drawled.

THEBAN HYKO'S grass rope slipped from his hands. He turned, faced a long lanky stranger dressed in

the bright quaint garb of the Bronze mountain peasant. The stranger puffed at a long stemmed pipe; he studied Theban out of gentle deep-set eyes, he was evidently trying to make sense out of such a high-ranking White Comet uniform in such dusty tattered condition—being worn by an unshaven weatherbeaten man with an ugly bump on the side of his head.

"I figured I'd find you dead," the mountaineer drawled. "I seen you hike over the horizon yester-*punto*—I rang a bell for you as loud as I could for a *deci* or two, but you was too far away to hear. So—" the mountaineer glanced into the yellow-floored crater—"I figured I'd find you dead."

Theban nodded. "I was too exhausted to climb down those crags or maybe I would have been dead. But now I'm too curious to take a chance just yet. Do *you* understand this death business?"

The mountaineer grunted. Obviously he didn't. He smoked up three pipefuls explaining that there wasn't any rhyme or reason to it. He'd been studying it for many a season and all he could say was, keep away from it, the farther the better. But it all began, he said, when the Draz-Kang space ships first began to weave back and forth from that little mound of green out in the middle of what he called the death patch.

"Now and again I've rounded up droves of rabbits," the mountaineer monologued, "and chased them down over an incline. Sometimes the death bolt is a little bit slow to catch them and I'll think it must be turned off. But directly it will sweep across—always clockwise, I've noticed—you can tell by the way it mows them down. It's like a machine gun turning past them."

Theban snapped his fingers with sudden inspiration. "You rounded up droves of rabbits?"

"Hundreds of them — sometimes thousands."

"I could use a hundred or so rabbits," Theban said with a sudden tinge of eagerness. "I've got a notion— Do you think you could round some up right away?"

The mountaineer gave the weatherbeaten purgier a curious look. "Sure thing. Proud to be of service to an officer."

The mountaineer put his pipe in his pocket, gave an awkward but well-meant salute, and struck out.

"You'll find me a little farther down the line," Theban yelled after him.

The mountaineer turned back and shook a warning finger. "Look out for them crevices and valleys. You've got to keep well *up*. I had a herd of goats one time that got to grazing down a ravine and they—"

"I'll be careful. Don't fail me on those rabbits."

"Very good, sir."

The mountaineer ambled away.

THEBAN skipped along the rugged crater's edge, over the pock-marked bronze-colored rocks. His eye automatically measured the pits and crevices over which he leaped.

He stopped abruptly.

Here in the surface of a crag that overhung the crater's vertical wall was a small natural pit of the sort he was looking for. It was deep enough that his long arm could reach to the bottom of it; deep enough and straight enough, he judged, that it would serve as a prison for his promised supply of rabbits. From this point, then, he would make his tests.

Next, Theban bounded toward the nearest grassy valley; but with calculated caution he stayed to the upper

edges. He snapped off the long tough stalks of grass, wove strands of rope.

His hands worked swiftly. His eyes continually sought the skies in the hope of seeing nothing. Rather, his vision seemed to push at the skies, to press back that ship that he feared would soon swoop down out of the spaceways.

From time to time he glanced at his watch—always with a twinge of disappointment, for it no longer registered the correct *punto*.

It was a splendid instrument, that silver encased timepiece, as fine a piece of scientific equipment as could be made. From the day the head purgier had presented it to him (in recognition of personal valor) the watch had never been re-set; nor had it ever missed a tick of time. It had been accurate to the very *milli-millipunto*.

But during his recent unconsciousness it had run down. He had set it by guess; his guess had been based on the only evidence of passed time that he had: the fact that the ugly gash which Vida had struck in the side of his head had knitted and was healing.

However, he still had his watch, and that was something. It was the only piece of scientific equipment that he did have. Otherwise he was dependent upon the materials that Nature afforded, together with his own ingenuity.

Theban returned to the crag with a supply of ropes.

He lay on the rock and looked down over the edge—down almost two hundred feet. If he were only already down there—!

Automatically his eye traversed the wide floor of yellow soil. Dozens of half-formed plans banged through his mind. He felt certain that if he could only once drop safely through the mysterious screen of death, he could skip a few miles across that broad yellow floor and find entrance to the hidden underground headquarters of the Draz-Kangs.

And if he could gain entrance, perhaps he could find Ilando. Perhaps Ilando would yet come to his senses—

A shadow floated across the crag. Theban came up with a start. It was only a cloud. His eyes searched the skies; he saw no ship.

Gradually the clouds spread over skies; it was futile to keep watch any longer. Still, every distant mutter of thunder caused Theban's fingers to go tense against the crags for an instant. Then the chills would dissipate themselves through his nerves, and he would breathe easier.

If he were only down two hundred feet below, perhaps he could write some kind of warning that could be read from the skies. He now noticed that the large stones which he had pushed over the cliff farther up the line were gradually sinking into the yellow soil. That floor of yellow soil, then, was simply a tough spongy swamp.

Gradually, as the stones sank, the depressions they formed filled with inky black liquid.

FROM back of Theban came footsteps and a hearty voice.

"Here's a few to start on," the mountaineer grinned. He had twenty-five or thirty of the kicking little beasts tied to a rope and slung over his back. "I've got plenty more waiting in a trap."

"Good work," Theban commented. "Just drop them in the supply room." He motioned to the small pit.

"I hope you know what you're doing," said the mountaineer with ill-suppressed curiosity.

"I'm going to make some tests. I want to find out when they die and when they don't."

"You want 'em to kick?"

"The more the better, so I can tell

precisely when they die."

"Here," said the mountaineer, producing some wire from his pocket. "If you'll use this and take a stitch through the slack hide on the tops of their backs, they'll kick like they was frying."

The mountaineer went back after more rabbits. Theban broke the wire into short segments, tightened his teeth at the prospect of inflicting suffering upon innocent animals, reached for a rabbit, hooked it to the end of a rope, let it down.

The rabbit kicked all the way down through the danger level; but on the way up it went limp with death.

Theban repeated the experiment time after time. Sometimes it was death. Sometimes life. Death. Death. Again, death. Then life.

He sped up the experiment by hooking four rabbits on the rope, strung out at intervals of four or five feet. He let them down rapidly.

Death. Death. Death. Life! Rabbit number four kept kicking.

He drew the rope up rapidly. Number four was still alive!

Down went the rope. Number four went limp.

Soon Theban knew at exactly what elevation death struck—*if* it struck at once on the way down. He continued the elevation tests, checking his results with trials from other points along the crater's edge. He sent the mountaineer to a point five miles farther around the circumference to make tests from there. The conclusion was always the same.

"It's like I told you," the mountaineer said on returning, "You can't get past it. The whole crater's full of it."

"But it *isn't* on the crater floor," said Theban. "We've let plenty of live rabbits get through, and they were still kicking until they struck the floor. And some that weren't killed from the fall went crippling away."

"That's why I say there's no sense to it."

"But there is," Theban insisted. "We're trimming it down to something that makes sense. We've got the elevation. We know there's a span of about forty feet that the death passes through. It's invariably on that level. The hundred feet below are always safe. And so are the fifty or sixty feet above."

The mountaineer nodded slowly.

"That death level is like a gigantic wheel," Theban continued. "It's a wheel made out of spokes that are invisible shafts of death."

Again the mountaineer nodded. This was as he had visualized the thing. "The spokes keep turning like hands of a clock—"

"Only much faster—"

"Like a machine-gun spraying across a target. Only we don't hear any bullets—"

"Or see any fire. The only thing we see—" Theban straightened up to his full height and peered at the distant clump of verdure in the center of the soil-filled crater, "is that little black nob peeking out over the tops of the trees."

"That's the hub of the wheel?"

"It must be."

THEBAN got down on his knees and sketched a diagram in the bronze rock-dust. He drew a circle. That was the crater. He heaped some dirt in the center of it. That was the island-like formation. He pierced a wire down into the heap and drew it out. That was the Draz-Kang entrance to their underground nest, big enough for their space ships to enter.

Then Theban planted a tiny twig near the make-believe entrance. That was the tower from which the invisible

rays of death shot forth like beacons.

"Looks to me like you've got it all doped out," the mountaineer commented.

"I'll need more rabbits," said Theban. "We still don't know the most important thing."

The mountaineer blinked curiously. Theban drew several spokes from the twig out to the center of the ring. He left one sizeable gap.

"A couple spokes missing?" the mountaineer asked.

"Maybe three or four," said Theban. "That's what we've got to find out."

"But what makes you think—"

"Once I held a rabbit in the death band for more than twenty *centi-milli-puntos*. I had my watch against my ear and I counted off twenty-three ticks before the rabbit suddenly went dead."

The mountaineer scratched his head. "I don't get it."

"They've left a gate," said Theban. "The death spokes are close enough together that no space ship or plane or person is likely to get through. But they've left a few spokes out, and they've evidently got the system timed so that they can cruise back and forth without danger."

A faint light of understanding came into the mountaineer's eyes. He lit his pipe and puffed silently, still studying the diagram.

"I'll need a lot more rabbits," Theban repeated. "I've got to find out exactly when and how often that invisible gate swings by before I go down."

The pipe dropped from the mountaineer's teeth. "Before you *what?*"

"Before I climb down into the crater."

THE mountaineer's fingers spread nervously. "You figure you know enough about this thing to *whip* it?"

"I'm soon going to, if you'll get me some more rabbits."

The mountaineer's gaunt hands clutched Theban by the shoulders. "Don't do it. I've seen too many things die—"

"I'll be perfectly safe, as soon as I get this thing timed."

"After all the rabbits you've seen go dead—"

Theban gestured with a restraining hand. "You've admitted, haven't you, that there's no danger if I can once get through to that yellow floor?"

"Sure, I admit—"

"Have you ever seen any people walking down there in the crater?"

"Over toward the island — yes. Plenty of times. They was too far away for me to see much. But a few *puntos* ago when a space boat landed out beside the island I could see a lot of figures come up from nowhere and swarm around it."

Theban nodded. "I know about that space boat. It was my fellow purgiers trying to crack this death trap."

"It cracked them," said the mountaineer in a warning tone. "They sailed down out of the sky from over yonder peaks and came down for a low straight shot—"

The mountaineer broke off. Something out of the distance seemed to have silenced him. Theban's eyes flashed toward the deep purple clouds. He saw the bullet-shaped blob of white skimming down toward the crater.

The white ship retarded. It circled like a buzzard bent on swooping down upon its prey. With each spiral it drew closer to the island-like mound in the center of the crater.

"It's a White Comet!" the mountaineer gasped.

Now the low roar of rocket motors reached their ears.

Theban tore out of his shirt like a

mad man. He ripped the white undershirt from his body. He hooked it and his regulation blue shirt to the end of a rope. Near them he looped the rope into a slip knot, poked a crooked stone into the loop, tightened the rope down on the stone.

Then catching the rope a few feet from the end, he began whirling it over his head. Weighted with the stone, the white and blue garments fluttered through air. It was a weird signal, concocted on the spur of the moment; and Theban's hope that it might be seen was only the wild frantic hope of a lost cause.

Wider and wider he flung the circle of white and blue flags. Lower and lower the white space boat descended. It was almost upon the island. Theban let the weird signal sail out of his hands. He stood, his arms and fingers outstretched, powerless to stop the awful thing from happening.

The controls of the space boat suddenly seemed to relax. Two or three miles though the boat was from Theban's eyes, he knew the very instant that death struck through its every occupant. The stream of rocket fire chopped off; the pilot at the throttle must have yanked the lever backward as he toppled.

The white ship skated a quarter of a mile or so across the swampy yellow floor and stopped with its nose half buried. The rocket motor echo died away; the hiss and screech of landing went silent.

"Dead!" the mountaineer muttered.

CHAPTER IV

Number Thirty-Six Is Death!

"WHAT next, sir?" the mountaineer asked for the fifth time.

The young purgier scarcely moved. He was like a bronze statue fixed upon the bronze crags, his arms still half extended, his unfathomable gaze frozen upon the distant gray-green mound where the little stream of black figures wove to and fro from the crippled, slowly sinking space ship.

Those figures were the uniformed Draz-Kangs, Theban knew, although they were much too far away for their uniforms to be distinguishable. They were plundering the ship, no doubt, and gloating over another victory, and mocking the dead purgiers.

A gentle rain began to fall. Theban's hands slowly planted against his hips, then rose to lock behind his head.

"What next, sir," the mountaineer repeated gently.

"More rabbits. . . ."

DARKNESS CAME, and with it a storm that raged and thrashed through the Bronze mountain valleys.

With the light of the new *punto* Theban's experiments went on.

The fallen White Comet ship had sunk from view, and only a long black line across the bright yellow swamp floor marked the trail of its final landing. Far and wide over the swamp-filled crater little splotches of black—pools of water—dotted the yellow surface.

All through that *punto* Theban continued his tests, and by the time darkness descended he knew the individual shafts of death as he knew the dials of his space ship controls panel.

With a new dawn he put his scientific findings to a final test. The mountaineer was at his side, ready for orders.

"The gate has just passed," said Theban consulting his watch. "You'll have time for a smoke before it comes back around again."

Again Theban sketched his diagram of the wheel with numerous spokes, each representing a beam of death.

There would have been a hundred spokes but for the three that were missing.

"That means a descending ship has three chances to get through against ninety-seven to foul up," said Theban, "unless it came down so swiftly that it could pass through the death band in five *centi-millipuntos*. And if it did it wouldn't have time to angle off for a landing."

The mountaineer puffed foggily.

"Here goes the final test," said Theban. He picked out a lively rabbit, hooked it to the end of a rope, handed the rope to the mountaineer. "Lower him almost to the death level. Now. We're going to drop him into the level between every spoke of death, and jerk him up again before it hits him. If our timing is accurate he'll keep right on kicking. Ready?"

"Ready."

"Let him *down!* Two. Three. *Up!* Five. (One. Two. Three. Four. Five.) *Down!* Two. Three. *Up!* Five. (One. Two. . . .)"

"He's still kicking."

As the counting went on the mountaineer grew more and more baffled. How was this that the rabbit didn't go dead? Perhaps the invisible force was no longer there. He would put it to a test of his own.

". . . Two. Three. *Up!* Five. (One. Two—")

"Hold on, we've got a dead rabbit," the mountaineer drawled.

"What?"

"All my fault," said the mountaineer. "I got a little sluggish on the rope, and your five-one caught him."

Theban reached for another rabbit. There was just time to hook it on and swing it down before the invisible gateway rotated past.

"Down. One, two, three, four, five, six— Leave it down."

"It's still kicking."

"It'll keep kicking for exactly thirty-five *centi-millipuntos*. That's the outside limit that the Draz-Kangs give themselves to pass through their own gate."

"Still kicking."

"Thirty - three, thirty - four, thirty-five, thirty-six—"

"It's dead, sir. Stopped on thirty-six."

Theban rose abruptly. "I'm leaving. I may not see you again. But I want you to take this paper to the purgier headquarters at the Bronze Planet Capital. Get a pack mule. Make all possible speed."

He handed the mountaineer a scrap of paper closely written on both sides. The mountaineer climbed to his feet and saluted.

"This describes the system we've worked out and makes note of your fine service. There'll be a reward waiting for you. I hope you can get there before another White Comet ship sets out for this death trap, though I doubt it. Good-bye."

"Good luck."

THE mountaineer gave another awkward salute. His gentle, curious eyes followed Theban as the latter made his way down the crater wall.

Thirty or forty feet down the young officer paused, studied the jagged wall below him, planned his steps.

Then came a long moment of waiting. The mountaineer could see the gleam of Theban's watch and knew he was counting off the *Centi-millipuntos*, waiting for the invisible gateway.

Suddenly Theban made a run for it. He bounded down three perilous steps, sprang for the little cone-shaped landslide that projected from a wide crevice, slid, slid and scrambled—down—down!

He was at the foot of the crater wall.

He clambered to his feet, turned and looked up toward the mountaineer two-hundred feet above him. Once more they exchanged salutes, and with that the young officer struck out across the wide yellow swamp.

He left foottracks behind him that soon filled with black water. He looked back at the trail he was making; then, to the utter astonishment of the mountaineer he suddenly changed his course as if he intended to follow the circumference of the crater.

"Does he figure he can circle their camp bolt upright?" the mountaineer muttered to himself. His eyes followed the blue tattered figure as it slogged along across the swamp. "They'll spot him dead certain. He must be crazy . . . And all them figures and time schemes. . . . He must have fell through safe *by accident.*

Suddenly he saw that the trudging form changed tactics once more. Theban was *rolling* over the ground. And gradually the path over which he rolled seeped full of black water, to form a wide black line.

"If he thinks *that's* going to hide his trail," the mountaineer mumbled, "he *is* crazy."

Then the mountaineer glanced at the paper in his hand, turned and made tracks of his own toward a faraway neighbor's where he might borrow a pack mule.

CHAPTER V

A New Captive for Vida

THE underground nest of the Draz-Kangs was a riot of celebration. Of all the Draz-Kang hideouts, the dead crater of the Bronze mountains had long ago become the most popular and the most populous. It was the natural magnet for the Draz-Kang Carnage Ring—the inner circle which governed the policies and staged the attacks and planned the campaigns to undermine the law and order of the White Comet Union.

The present orgy of shouting and dancing and tin-pan beating, drinking and fighting, had begun with the recent crash of another White Comet ship.

When the black-uniformed guards had chased out over the yellow swamp to bear back the lifeless bodies of more purgiers, an uproar had torn loose throughout the rocky chambers and halls of the dead crater. Now the bedlam had been going on for two *puntos;* it would probably go on for several more.

When the first purgier ship had plunged to its death, several *puntos* before, the weird rollicking riot had been almost endless; for the Draz-Kang riff-raff, excited by the professional terrorists, had been led to believe that the moment for a mob attack on the Bronze Planet Capital was at hand.

Then the mad orgy had been stopped with the suddenness of a falling meteor. A White Comet ship had floated down into the nest to stop at the foot of the space-ship runway. The air locks had flown open and Vida had come out. Vida the Beautiful, the favorite of the Carnage Ring. And with her had come a young male prisoner wearing the uniform of a White Comet guardsman.

With her usual scorn for the riff-raff, the howlers and noise-makers, Vida had gone directly to the Carnage Ring with her prisoner and her account of her adventures. The captured ship had been rolled into a repair chamber for repainting. And the mob, left curious, had quieted.

But now the mania of dancing and marching and shouting was on again in full force, and the rhythmic mob-cries rang through the vast cavernous spaces.

Blannnng! Blannnng! Blannnng!

The alarm gongs suddenly rang out with a spine-tingling shrillness that brought all pandemonium to a halt.

The loud-speaker system crackled and sputtered and burst forth with deep-throated words.

"Attention, Draz-Kangs! The Carnage Ring had several announcements of general interest.

"Announcement number one: The Crater Killer is being shifted from time-system number three to time-system number four. All persons who contemplate leaving these quarters by space ship or otherwise take notice. Time-system number four goes into effect this instant."

As the words were spoken, an engineer stationed in the tower high over the underground nest pressed a button. The colored signal lights that blazoned upward to be read by any approaching plane or space boat changed from "3" to "4."

"Announcement number two: The reason for this sudden shift is that the purgiers may have solved the rhythm of time-system number three."

A widespread groan sounded through the Draz-Kang caverns.

"At this moment a uniformed man believed to be a purgier is approaching our nest. Our observers saw him descend over the crater wall. We must assume that he *did not* come through the Crater Killer *by accident*. However, he will not know that the time-system has been changed. He will think he knows his way out safely. Don't disillusion him. All guards take notice. If he becomes your prisoner, you mustn't know that he knows anything about the Crater-Killer system.

"Announcement number three: All guards at the entrances keep on the lookout but keep yourselves concealed. If the man is a purgier it is more important to observe him and find out what he knows and what his plans are than to capture him outright.

"Announcement number four: Let the merry-making continue!"

The first three announcements went over the heads of hundreds of soggy staggering merry-makers, but announcement number four was understood by everybody. Through the rocky walls high and low the battering of cymbals, the blare of horns, the shouting of hoarse voices carried on.

VIDA the Beautiful hurried along a dimly lighted avenue to the prison cells.

Two guards saluted her, conducted her through a series of doorways to the private luxurious room in which Ilando was interned. They locked the door behind her and departed.

Ilando leaped to his feet. Under the amber glare reflected off the walls of green-gray hewn rock his face was pallid. His white fingers twitched nervously.

"What's the matter, my fair-haired friend," said Vida with a slight smile. "You don't look so happy. Maybe you need a drink."

She handed him a small bottle of wine. He filled his glass and drank. Another glassful drained the bottle. He gulped it down.

"Vida, what's the meaning of all this?" he demanded savagely. "You told me to wait until you arranged for our escape—"

"Now don't go raving like a mad man—"

"I'll be a mad man if this keeps up!" He paced the floor. "I'm nothing but a common prisoner here!"

"That's my scheme, I tell you," the girl retorted, backing out of Ilando's path. "You've got to *look* like a prisoner and act like one—"

"Act like one, hell! How can I do

anything else? Guards and locks and bread and water—"

"You're doing fine! That's beautiful!" The girl's enthusiasm was tinged with sarcasm, but Ilando was in no condition to detect the subtleties of her manner. "If you acted any other way these Draz-Kangs would tear you to pieces, and what would happen to our sweet little air-castle?"

"Then you *are* going through with it!" Ilando turned to the girl fiercely, tried to catch her shoulders but she eluded him. "You'll get us both out of here?"

"Do I have to go over all that again?" Vida whined with an irked gesture.

Ilando followed her with a desperate throb in his voice. "Vida! Vida! I love you so! I can't endure much more of this—"

FOR a moment the girl stood before him and the light played over her gorgeous face and the taunting beauty of her figure.

"All right, all right!" She gave a wave of impatience. "Stop your raving. It won't get you out any quicker. What can you hear back in this room?"

"Hear? Nothing. It's so ghastly quiet I wouldn't know there was a soul within miles—except when you or the guards come back—"

"You can't hear the celebrating—or announcements?"

Ilando shook his head blankly, and Vida, listening for a moment, realized that he was telling the truth.

"All right. That's all I wanted to know." She started to go.

"What's happened? Why are they celebrating? What are they announcing?"

"Another victory," said Vida dryly. "Another ship of purgiers fell to us a punto or two ago. . . . Well, you don't seem very happy about it."

"Sure, that's good. That's fine," Ilando commented in an uncertain tone. "But T h e b a n—Theban Hyko—he wasn't one of them was he?"

"What if he was?"

"Was he?"

"How could he be? You turned him loose in the mountains, you rat, or I'd have had him—" Vida broke off sharply. The uncontrolled ire that rang through her voice brought back the familiar gleam of disillusion in Ilando's eyes. She warded off his suspicion by taking his hand. For a moment her words were hurt and pleading.

"But Ilando, dear, how can I forget what you did? You deliberately deceived me. You knew I wanted to bring him back as my captive—"

"That wasn't what you told me when I agreed to let you hide in his space boat—"

"I don't give a hang what I said." Vida whirled away. "That was what I wanted, and you knew it. And that's why I slammed him over the head when he started for you—and what did *you* do? Turned him loose! Set him free while I slept! I ought to kill—"

Again the girl caught herself, and none too soon. Ilando came at her, his eyes blazing wide, his fists clenched. He seized her by the arms, forced her against the wall—

"Vida! Vida!"

The girl tossed her head slightly to one side and assumed a cool tantalizing smile.

Ilando breathed nervously, the muscles in his face twitched and jerked. "Vida, if I weren't so sure of you—you and me—"

The girl slid out of his relaxed grasp.

"I told you to stop that sentimental talk," she taunted. "Someone'll hear us. And let me tell you another thing. If Theban Hyko should find his way into this Draz-Kang nest, watch out

how you let him work on you—or you'll find yourself in the same boat with him."

Ilando gave an astonished gasp. "You —you think he might come?"

"They say someone slipped through the Crater Killer early this *punto—on foot*. Someone in a purgier's uniform. Figure it out for yourself."

Vida called for the guards and with a shrug of the shoulders she sauntered away, leaving Ilando to his thoughts.

CHAPTER VI

Stronghold of the Draz-Kangs

THE closer Theban Hyko came to the verdant mound that heaped up in the center of the swampy yellow floor, the less he liked its looks. That tower top, from a closer view, looked as if it might be more than the hub of a gigantic death wheel. It might also be an observatory.

Theban knew he had taken a long chance, maneuvering about in daylight. Now he waited for darkness, clinging perilously to scraps of swamp weed to keep from sinking in the spongy soil.

Under the protection of darkness he traversed the last mile. The mound loomed black against the deep blue sky. Apparently the long-dead volcano had built, in its dying days, a smaller crater cone within the vast original crater. It was the smaller crater that loomed up as a mound; and within its hidden recesses—as yet unexplored by any purgier—he expected to find the fugitive Draz-Kangs.

Halfway around the side of the mound the starlit paths converged toward a huge mass of blackness that Theban guessed must be the open mouth of the cave.

The low thuds of his tattered boots echoed back to him as he plodded into the cavern. It was a long, dark, gently-inclined runway. Gradually it closed in like a funnel, still large enough for the largest of space ships to enter.

Dim green lights could now be seen far down the way. Here and there splotches of black in the green-glinting walls indicated that there were alcoves, perhaps a maze of corridors, leading off from the main stem.

Theban cautiously ventured toward a few of these. But none were lighted. Sometimes there would be sounds of stealthy footsteps. Now and then he would catch sight of a dark shadowy human form moving across his path a few yards beyond him.

He looked in vain for stairs or ladders leading upward. He knew he was getting far below the level of the tower that dispensed the invisible death. Somehow he must get back—

At last the space ship runway veered off to his right toward a vast open shelf or chamber where he could see, under the dim lights, the hulls of a few idle ships. But most of the light, and certainly all of the noise, came from another direction. Theban followed the broad ramp to the left.

Momentarily a figure marched along in step with him. It was his reflection in a glazed surface along the wall. It gave him a sense of satisfaction to recall that his identity as a purgier was lost within a disguise of an unshaven face and a mud-caked uniform.

The walls widened, his vision spread over the wide plaza, ghastly brilliant under the purple lights. It swung in a wide circle; far across the open circular chasm he could see it on the other side.

Here and there over the circular purple plaza were groups of figures, some doing weird dances, some chasing and playing, shouting and fighting. Theban wondered whether there would be safety for him in such a chaotic mob. Perhaps

if he joined the confusion, he could get onto the ropes of this place without being noticed.

A group of careless merry-makers staggered past him and went dizzily on their way. Theban grew bold, advanced to the railing of the plaza, looked down into the vast open chasm that had once been the mouth of a volcano.

FOR all the lights that lined the bronze-hued walls, this might have been the inside of a vast dome of some gigantic building. Three or four hundred feet down the opening met a white-rock floor. Squads of Draz-Kang troops were doing drills, and the thunder of their tread sounded clearly from the bottom of the cavern.

The purple plaza seemed to be the central dividing level of this underground world. There were innumerable lesser balconies above and below it. As Theban's eyes roved over the endless maze of stone-hewn pathways and alcoves and windows that opened upon this central shaft, he involuntarily shrank back toward the deeper shadows.

There were eyes—hundreds of pairs of dark eyes—staring toward him out of dark faces. Gradually the clamor of merry-making was dying down, and in its place came the echoes of breathy whispers and hushed talk.

Still, Theban saw that many dark-clad figures seemed to be going about their routine business. The tread of marching feet continued to echo from the depths. Higher up there was a shelf upon which men were carrying on target practice with flame guns. Elsewhere there were games of chance, eating, drinking. A whole world of activity was visible from the purple plaza. And up and down the cylindrical walls was a continual traffic of goods and persons, carried on moving cable.

Theban's eyes turned back to the shadowy alcoves and stairways that ranged aloft. Those mysterious watchers were still there—

Some raucous yelling burst out upon the plaza. A party of ten or twelve merry-makers came chasing down the way. They stormed past Theban, their half-clad bodies gleaming under the purple light, their unkempt black hair flying—

Theban's blood went cold. The streamers and trophies they were waving with such mad glee were *purgiers' uniforms and badges*—relics from the White Comet ships!

As the last of the mad procession passed, Theban caught the insignia on a sleeve being waved from a stick. That had once been the coat of a comrade!

Theban's muscles turned to steel. He chose the most likely stairs, ascended as swiftly as dared, paid no heed to the figures he passed. Higher and higher—now he must be getting into the base of the tower, for the walls were closing in rapidly.

On the red balcony he stopped. Three men faced him.

The rafters of a tower were above him, and a ladder pointed the way. Off from the red balcony, beyond doorways arched in red lights, were power rooms where engineers watched over humming motors.

Over the edge of the balcony was that vast open chasm, its walls lined with moving cables and zig-zag stairways, purple-lighted plazas, and—far, far down—the little white floor alive with squads of little black figures no bigger than bugs.

Three ugly defiant faces, three black uniforms, three gleaming flame guns challenged Theban's right to move a single step farther.

Theban lifted his hands slowly. Out of the corner of his eye he concentrated

on the nearby power room.

One quick monkey wrench in that machinery, he thought, might queer the whole death trap. It would mean quick death for him, no doubt; but for the White Comet Union it might mean—

"Turn around and march!" the gutteral voice of one of the gunmen bawled. He gave a menacing gesture with the flame gun.

Instantly Theban made his decision. He sprang for the power room door. Back of him the flame guns hissed. The hot blaze caught the calves of his legs.

His leap for the open door was cut short. A beam from within swung at him with the precision of electric-eye timing. It was an automatic protection device.

The beam caught him across the chest, knocked him backward. He staggered as if he were blind. His burning legs sank beneath him. He tottered over the balcony rail, clutched frantically for anything his hands could grasp, his fingers froze upon a rope!

He swung downward.

The vast underground world yawned beneath him—

Blannnnng! Blannnng! Blannnnng! Blannnnng!

THE shrill alarm bells rang up at him with a spine-chilling clangor. The ear-splitting volume was redoubled by the closeness of the walls. He seemed to be hanging at the top of a gigantic bell, whose wild cry set the nerves in his grasping fingers to tingling.

"Get him off that alarm bell!" one of the three gunman roared. "Get a rope on him, chop him down, anything!"

Theban hung on for dear life. He started to climb up, hand over hand, but the legs of his uniform were ablaze, and his energies went into kicking—and hanging on.

Now the men caught the rope and drew him up. The alarm bell ceased; its echoes gave way to a frantic hum of voices that welled up from all the depths below. The stairs clattered with footsteps. Several important-looking uniformed men bounded up toward the red balcony.

"A fine mess!" one of the gunmen muttered ruefully. "Now we've got the whole Carnage Ring on their high horses!"

All fifteen members of the Carnage Ring crowded onto the red balcony in time to see Theban Hyko drawn safely over the rail. The gunmen slapped his blazing trousers with the ends of ropes until the flames were extinguished.

"So that's the purgier!" "It's Theban Hyko, I've seen his picture!" "Well, I'll be damned, we've got one alive at last!" "This is another feather in Vida's hat!" "Why?" "She claims she tricked him into coming here."

The fifteen members of the Carnage Ring and the three gunmen all talked at once.

"This calls for another celebration, gentlemen!" "What the hell was he trying to do, crash the Crater Killer?" "Get him down in a cell, clean him up, and put some prison clothes on him." "Go say something in the speaker. The Draz-Kangs are on a rampage." "All right, let Vida have him. If she rounds up a few more key men we'll have the whole damn Union on the run." "Give him to Vida on one condition." "What's that?" "The Draz-Kangs have got to see him die. That much they'll demand." "She'll give 'em that, and make 'em like it!" "Give that rope a jerk, will you?"

Blannnnng! Blannnnnnng!

"Fellow Draz-Kangs!" the loud speakers reverberated throughout the cavernous world. "Another victory! We've captured the famous purgier,

Theban Hyko . . ."

The words were swallowed up in a roar that shook the cylindrical bronze walls of the inner crater.

CHAPTER VII

A Woman Spurned

FOUR long silent painful *puntos* passed, according to Theban's prized silver watch, before anything happened to relieve the nothingness of his imprisonment.

Then, at the very time he knew that dawn must be breaking upon the Bronze mountains and the yellow swamps somewhere over his head, an unexpected break came to Theban Hyko.

He heard the guards speak of another prisoner, a young guardsman by the name of Ilando Ken. Instantly Theban was on the alert.

Soon the bars of his cell swung open, the guard stepped in, placed his breakfast on the table, started out. Theban leaped for him, struck him down, seized his keys. A second guard dashed up, and Theban caught him at the door, overpowered him.

The clash had come and gone so quickly that for an instant Theban was flushed with confidence. He looked toward the outer end of the prison corridor where he knew a squad of armed guards waited. He was tempted to make another try for the tower of the Crater Killer.

But a backward glance at the two men he had just bound and gagged restrained him, for he saw one of them give the other a slight nudge.

Yes, it was perfectly plain. He had overpowered them too easily. They had been unarmed. They had spoken of Ilando Ken within his hearing, then they had deliberately given him a chance to break out, knowing that he would go to Ilando. Vida was back of this!

Very well, he *would* go to Ilando. Nothing could make his own plight any worse than it was. And as to Ilando's plight—

"Theban, you've got to get me out of here!"

Ilando's taut voice sawed upon Theban's nerves, but Theban, peering through the bars, looked past his erstwhile friend to the smooth-hewn walls that surrounded him.

"Are there any earphones in here?" Theban asked sharply. "I've been tricked into coming to find you."

Ilando's eyes swept the room and came back to flood their terror upon Theban. "You've got to get me out of here, Theban!"

Theban spoke coolly, bitterly. "Aren't you here from choice?"

"God, no! You've got keys, Theban. You can get me out. You know how to beat the death trap, too. I heard the guards say so—"

"Why should I get you out?"

"I want to go back to Frigio. I want to go back, I tell you— Finish my term. *Don't look at me like that!* I mean it, Theban! God, if you'll just get me out of here—give me a chance—"

Smash! In his uncontrolled gestures Ilando struck a glass off the table. It crashed to the floor, and he trod over it, scarcely noticing.

"You could tell them I was with you all the time, Theban! They wouldn't have to know I was a—a—"

"*Deserter* is the word," said Theban quietly.

"Don't say it, Theban! For God's sake, don't ever say it!"

"What else can I say?" Theban turned a key and entered the luxurious prison room to stand before Ilando. He

stood with the unbearable calmness, in Ilando's erratic thoughts, of one who stands fearless before a firing squad.

Ilando's high-strung voice dropped down to a low hoarse whisper. "Theban. Theban, listen to me. You're the only one who knows. The only one in the whole White Comet Union. They all think I'm with you. *You* can save me, Theban. You can give me a chance to start over—"

"You're talking wild. You're a prisoner here. So am I. These Draz-Kangs aren't going to let us get out. They'd hack us to bits and burn us to charcoal before they'd see us set free—"

"They're not *all* so cruel—"

"I've had lots of dealings with Draz-Kangs—"

"You forget, there's Vida—"

"Vida!" Theban fairly howled the name. "You poor blind idiot, haven't you come to your senses yet? Don't you know that girl is poison? She hasn't an ounce of honest sentiment—"

"Just how do you know so much?" interrupted a mocking female voice from the open door. "And since when have you been so interested in the honesty of my sentiments, Mr. Hyko?"

THEBAN and Ilando turned to face Vida—Vida the Beautiful, standing languorously in the doorway, her orange-red lips touched with an arrogant smile, her jewled shoulders and breasts glittering defiantly. A few feet down the prison corridor stood the two guards whom Theban had recently bound and gagged. They waited, with flame guns poised, for Vida's orders.

"Put him back in his cell," the girl said huskily, nodding toward Theban.

Theban tossed the keys over to a guard. Far down the hall the squad of armed guards watched the proceedings with alert eyes. Vida ordered Ilando's cell locked, she gave Ilando a saccharine taunt to the effect that her fair-haired boy must be well protected, then she led the way back to Theban's quarters.

"You may leave his cell door open for the present," Vida murmured to the guards, who nodded and moved on down the corridor. Theban walked into his cell and planted his back solidly against the wall. He gave no sign of surprise that Vida followed him in.

The girl stopped in the center of the little room, turned her face to the light, and applied a touch of powder to her cheeks, rouge to her lips. Then her eyes snapped toward Theban.

"You didn't answer my question."

"I beg your pardon."

"I asked you just when you became interested in my sentiments . . . Could it have been that certain moment on your space ship?"

"What certain moment?"

"Your memory is very bad, Mr. Hyko. Have you forgotten that for a moment you held me very closely—and very fiercely?"

Theban's eyelids lifted sullenly. "Did you come here to remind me of that?"

The girl sauntered across the room leisurely; she was obviously mindful of the fact that she was adorned in a very daring costume. Again she stopped under the light, placed an arm akimbo, tilted her head.

"The Draz-Kangs call you Hyko the Lucky," she said. "The name is very appropriate, don't you think?"

Theban did not answer; he breathed and stood and waited with forced restraint.

"Hyko the Lucky—on two counts. First, you happened to slide through the Crater Killer alive. That's a rare accident for anyone." With these words she studied Theban's face sharply. It told her nothing.

"In the second place," the girl con-

tinued, "they call you lucky because you happen to be my prisoner."

Again she cast a sharp glance at that bronzed face, which gave forth no more expression than the bronze walls.

"Perhaps you don't appreciate your good fortune. Perhaps you don't realize the extent of my power. I could even set you free if I wanted to. . . . You don't seem to be impressed."

The girl lighted a cigarette; she came close to Theban, blew smoke in his face, spoke in a low satiny voice. "But I think you *are* impressed. You're too proud to admit it, but you're too wise to pass up a chance to save your hide."

The lines around Theban's eyes tightened; he bit his lips, held his silence.

Vida passed her hand over his shoulder, tilted her face up toward his. "What's more, you're not half so immune to feminine charms as you try to pretend—"

"I'd burn at the stake before I'd plead to you!" Theban bit his words crisply, flung the girl aside.

She sprang back at him like an angered tiger, flung a clawed hand at his face, screeching, "You beast, you miserable—"

"Call me what you want to, my statement still goes!" Theban hurled the words at her so savagely that she winced. He caught her upraised arms, forced her out through the cell door, slammed the bars closed behind her.

CHAPTER VIII

Execution

THE ceremony was brief and unencumbered by ritual. The Draz-Kangs had little use for ritual. They preferred to take their excitement straight.

On the platform were Ilando and Theban and four other male prisoners, seated. At either side were a number of guards; and on the upper tier of the platform, standing, were the fifteen members of the Carnage Ring—and Vida.

The crowds filled the entire purple plaza—a closely packed swarm of slovenly black-uniformed creatures of both sexes. All rioting and celebrating had been suspended, the gambling dens had closed shop, the transportation workers had deserted their moving cables, the professional thieves and swindlers from the outside world had postponed their money-counting.

A spokesman from the Carnage Ring stepped to the microphones. Theban held his breath. At his side he could fell Ilando's arm quiver and twitch.

"Our own Vida the Beautiful," the voice rattled through the speaker system and thundered off into the distant chambers, "who has won many honors, and who has been responsible for so many out-and-out captures of our enemies, and who has converted so many fervent workers to our undying cause, stands before you this *punto*—"

A roar of enthusiasm broke loose as the speaker gestured toward the subject of his words.

"—stands before you this *punto* to ask the permission of the Carnage Ring and the Draz-Kang population to deal with each of these six prisoners—her own prisoners by every right—in whatever manner she desires."

The speaker bowed and retired, and the multitude responded with a terrific ovation. Then the people began to leap to their feet, shouting, waving, stomping. Vida the Beautiful stepped forth, extended her arms. The mob silenced.

"Your cheering," the girl spoke into the microphone, "indicates that you are willing to grant my request. (Another

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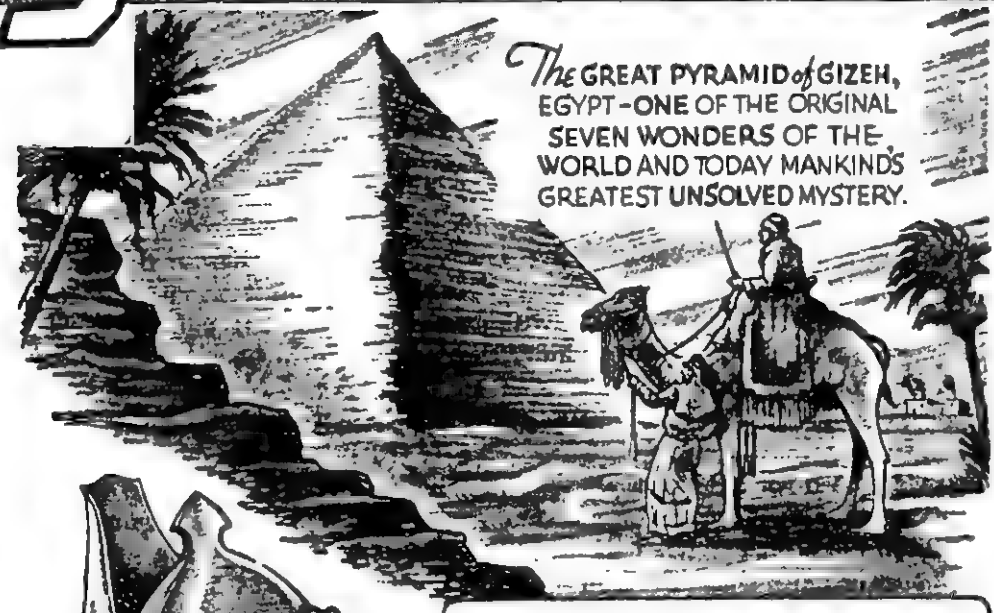
Scientific



The GREAT PYRAMID of GIZEH, EGYPT - ONE OF THE ORIGINAL SEVEN WONDERS OF THE WORLD AND TODAY MANKIND'S GREATEST UNSOLVED MYSTERY.

WAS CHEOPS, THE GREAT EGYPTIAN RULER, REALLY THE BUILDER OF THE GREAT PYRAMID? HERODOTUS, ANCIENT HISTORIAN, TELLS A STORY FULL OF IMPROBABILITIES

HOW DID THE ANCIENT EGYPTIAN ASTRONOMERS SOLVE THE SECRETS OF SPACE, TIME AND DISTANCE SO EXACTLY, TO GUIDE THE AMAZING FEATS OF THE ANCIENT ENGINEERS? OR WAS THE GREAT PYRAMID BUILT BY -- PEOPLE FROM ANOTHER WORLD!

Mysteries

By JOSEPH J. MILLARD

ONE of the original Seven Wonders of the World, the Great Pyramid at Gizeh, Egypt, still stands as a symbol of mankind's greatest unsolved mystery. Who built it, how was it constructed, and for what purpose?

No one knows for sure who built the Great Pyramid, although it is usually called the Pyramid of Cheops and its construction credited to that Egyptian ruler. The ancient historian Herodotus tells a long and rambling story of how Cheops employed 100,000 men, working in relays of three months, to complete the Pyramid in thirty years.

However, Herodotus' story is not only full of improbabilities but is admittedly based on gossip and tales handed down from earlier generations. Actually, many doubt that even our modern engineers, with all the massive machinery at our command, could complete such a colossal task in much less time.

The Great Pyramid is about 480 feet high and its base, approximately 764 feet on a side, covers thirteen acres. The whole structure contains more than 2,500,000 blocks of granite, each weighing tons—more rock than has gone into the construction of any other building in the world. To imagine a race whose knowledge was no further advanced than the Egyptians of that period producing such an engineering marvel is too great a stretch of the imagination.

But far more miraculous than the actual construction of the Great Pyramid is the wealth of engineering and scientific data embodied in its construction. Whoever did build the Pyramid knew scientific and mathematical secrets that remained lost to the rest of the world for centuries and it may well be that even today we have not achieved the knowledge possessed by that mysterious builder.

In the first place, the Great Pyramid stands within a few feet of the exact center of the ancient world and even this small error is accounted for by the fact that it was purposely set back in order to rest firmly on a solid strata of rock under the sand. Whoever located the building site must have been a surveying genius.

The Great Pyramid is oriented to within 4′ 35″ of true direction—a circumstance that could not have been achieved without a profound knowledge of astronomy.

It was not until 1900 that astronomers succeeded in calculating the distance from Earth to the Sun within a possible error of 42,000 miles. Yet simply multiplying the exact height of the Great Pyramid by 1,000,000,000 gives the figure 90,000,000—the approximate number of miles finally fixed as the Sun's distance.

If the diagonals of the base of the pyramid are extended, they coincide exactly with the eastern and western boundaries of the Nile Delta. The meridian of the pyramid's summit divides the Delta into two exactly equal parts whose central angles are exactly 45° and also divides the inhabited surface of the earth into two equal parts.

The pyramid is located at exactly 29° 58′ 51.22″ north latitude. This is meaningless until we realize that, due to refraction of atmosphere, we see the Pole Star just 1′ 8.78″ away from its actual position in space. When we add that refraction value to the pyramid's location, we get exactly 3°. And the 30th parallel is the one that separates the maximum land area of the world from the maximum of ocean area.

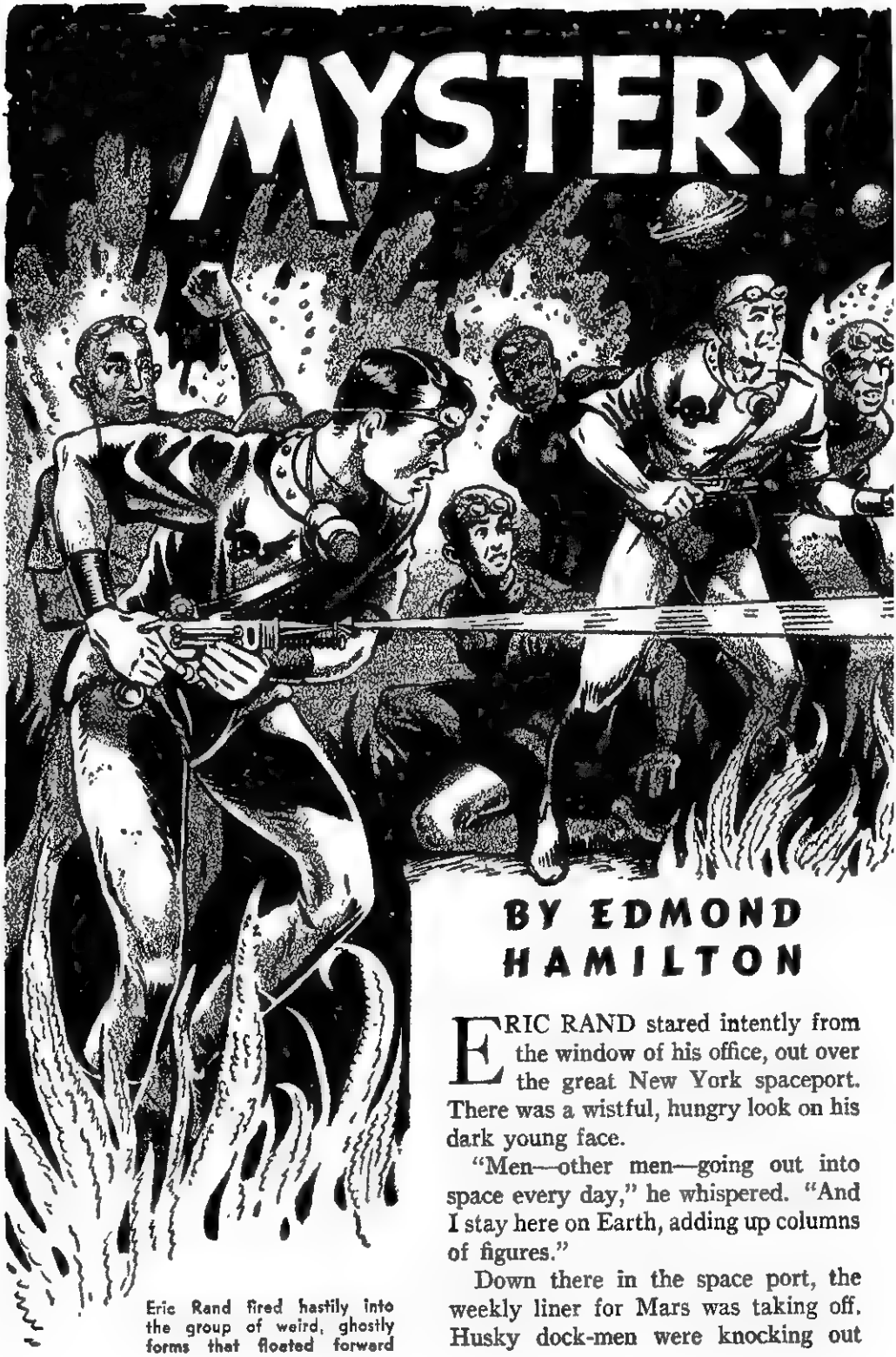
This could not have been accomplished so accurately without extremely delicate instruments. Nor could it have been even visualized by any but a scientist who knew the whole world intimately, knew the distribution of land and water over the face of the globe, knew the location of the Pole Star and understood atmospheric refraction of light.

From the lowest underground chamber of the Great Pyramid, one can look up along a slender tunnel and see the Pole Star just off center. Because of the motion of the earth's poles, our present Pole Star was not always the marker for the earth's pole. Only about every 26,000 years does the earth's pole point directly at our present Pole Star. Some scientists take the present direction of the tunnel to indicate that the Pyramid was actually built about 30,000 years ago when the Pole of the Universe was located in Alpha Draconis.

Still more miraculous is the fact that the faces of the Pyramid are slightly concaved and so situated that they indicate the moment of the equinoxes to within twelve hours of absolute accuracy. Thus, by throwing no shadow in the hollowed side, the Egyptian planting time was indicated.

Oddly, the unit of measure used in the Great Pyramid is the Sacred Elbow of twenty-five Pyramidal Inches and the Pyramidal Inch is exactly the same as our modern inch. Still more

(Continued on page 141)



Eric Rand fired hastily into the group of weird, ghostly forms that floated forward

MYSTERY

BY EDMOND HAMILTON

ERIC RAND stared intently from the window of his office, out over the great New York spaceport. There was a wistful, hungry look on his dark young face.

"Men—other men—going out into space every day," he whispered. "And I stay here on Earth, adding up columns of figures."

Down there in the space port, the weekly liner for Mars was taking off. Husky dock-men were knocking out

The lure of space travel was in Eric Rand's veins. Somewhere out there lay the answer to his birth. Why was it forbidden to him?

the holding-pins. Whistles were shrilling, and officers at the top of the gangway bawling orders. The round doors of the perpendicular, torpedo-like space-liner ground shut.

Eric Rand's strong hands closed upon imaginary controls. He pressed imaginary studs, pulled non-existent firing-levers. As though in response, fire blasted thunderously from the ship's stern rocket-tubes. The vast bulk lifted into the blue with a screaming roar, and was gone. Its cradle gaped bleakly.

Rand looked up into the blue sky after it, an aching yearning in his eyes. Then he turned slowly, a tall, dark young man with wide shoulders and flat hips and lean, rangy body, dressed in the customary loose gray trousers and belted jacket. Black-headed, long-legged, with black eyes that were achingly bitter now.

"What's the matter with me, Wilson?" he asked bitterly. "Why do I

stay here on Earth when every other young man goes to space?"

Old Wilson, the gray, crippled bookkeeper who shared this particular office of the big shipping company with him, looked up.

"Your uncle knows best, Rand," he said mildly. "It's for your own good that he forbade you to go to space."

"But space-sailing's the career I want to follow!" Rand said passionately. "Most young men my age are already officers in space-liners or freighters. You were yourself, when you were my age."

"Yes, I was," old Wilson agreed, "and what did I get out of it? Crippled for life in a crash-landing on Mars, like lots of others. Your uncle's right—you can follow a far safer career right here on Earth."

"And because uncle wants me to be safe," Eric Rand said bitterly, "I have to rust away my youth in this dull, monotonous routine. And everyone thinks I don't go to space because I'm afraid."

Rand was thinking of the faint, unspoken contempt that other men seemed to feel for him—men no older than he, who had been to Mercury, or had run the pirate-infested satellites of Jupiter, or had even voyaged to distant Neptune. When they talked of their experiences, he had to keep silent.

He had never even been in a spaceship. He had promised his uncle that he would never enter one, and he had kept that promise. But all his hopes and dreams were bound up in the life of a space-venturer. He felt like a trapped young eagle, yearning to soar out into the blue.

"I'm more than willing to take my chances in space," he told the crippled older man. "Uncle has no right to keep me Earthbound!"

The stout chief bookkeeper thrust his head into their office. "Rand, haven't you and Wilson got out that Venusian shipment invoice yet?"

"We'll get it out now, Mr. Corr," Eric Rand answered dully.

"See that you hurry!" snapped the other. "Nearly quitting time!"

A half-hour later, the quitting-bell rang. Rand listlessly cleared his desk, went to the roof where the fliers were parked, and soon was humming north toward the cottage where he and his uncle lived.

IT took twenty minutes for his fast atomic flier to reach the Catskill cottage. He landed on the green lawn beside the pretty little chromaloy house. Then Rand saw his uncle coming through the garden to him.

Philip Blaine looked older than his fifty years. A thin, slight scolarly man with graying hair and a fine face, he always seemed somehow anxious and fearful when he was looking at his nephew. That was the trouble, Rand thought bitterly—his uncle was *too* anxious about him.

"Hello, uncle," he greeted, hiding his feelings. "How did the gardening go today?"

Philip Blaine didn't answer for a moment, and his face seemed strangely drawn and pale as he looked at his tall young nephew.

"Eric, please come with me," he said, gravely and slowly.

He started across the garden, and Rand followed puzzledly. His uncle stopped at the door of a little metal cabin in the trees. It was Rand's own private den—and he felt a sudden pang of apprehension.

"Eric, I looked inside your cabin today, for the first time," his uncle was saying. "I've known you didn't want me to pry into it, and I haven't, but the door was swinging open as I passed

today. I saw inside."

Eric Rand's head hung. He said nothing. What was there to say?

"Shall we go inside?" Philip Blaine was asking. Rand nodded wordlessly, and led the way inside.

The tiny cabin was crowded. It resembled the interior of the bridge of a space-ship, to an amazing degree. The whole west wall was a bank of instruments used in space navigation—meteorometers, etherometers, drift-indicators, a big space-screen. Below the instruments, just as in a real ship, were dummy firing-levers, speaking-tubes, planet-compasses. The other walls were crowded with books on interplanetary navigation.

"What does this mean Eric?" Philip Blane was asking.

"You know what it means, uncle," Rand answered dully. "You forbade me ever to enter a space-ship. So I fitted up these instruments and pretended I was in a real ship, so I could learn space-navigation."

"You've not forgotten that wild desire of yours to go to space, then?" his uncle asked. His face was shadowed by pain and deep apprehension.

"How could I forget?" Rand asked heavily. "It's all I want in life, to be a space-sailor. It's all I'll ever want."

And suddenly Rand's pent-up longing burst into eager speech.

"Why can't I go, uncle? Why won't you let me take my chance in space as every red-blooded young fellow now does? I could be a good navigator—I *know* I could! I've practiced with these instruments and dummy controls till I could take up a space-ship right now, even though I've never been in one. Won't you let me go?"

Philip Blaine's face paled, and sick fear deepened in his eyes.

"I was afraid of this," Blane whispered. "I've seen this space-fever growing in you for years, but I've hoped it would pass away."

"It'll never pass away!" Eric Rand cried. "Day and night, I keep dreaming of going to space. Uncle, you surely won't keep me Earthbound any longer when you can see how it's ruining my life?"

Philip Blaine looked at him with sad, deep, haunted old eyes.

"I've got to tell you, Eric," he said finally, heavily. "I hoped I never would have to tell you—I promised your mother when she died that I never would—but now I've got to break that promise."

"Tell me what?" Rand demanded, his voice still quivering.

Blaine looked sadly into his face. "Eric, you think it's because I'm fearful for your safety, that I haven't let you go to space?"

Eric Rand nodded impatiently. "Of course. I know my father was killed in a space-wreck, and that my mother died of grief soon after, when I was born. That's made you too anxious for me."

Blaine shook his graying head. "No, Eric, it's not fear for you that's made me keep you Earthbound. You're a born space-sailor, I know. It's fear for *others* that's made me keep you from going to space."

Rand stared bewilderedly. "Fear for others? I don't understand. How could my going to space harm other people?"

His uncle asked a question. "Eric, you've heard of a man named John Randall, who lived about twenty-five years ago?"

"John Randall, the space-pirate?" Rand asked puzzledly. "Of course—everyone's heard of him."

"What do you know about him?" asked Philip Blaine.

"Why, what everybody knows,"

Rand answered perplexedly. "He was the most notorious space-pirate that ever lived, wasn't he? They say when he and his corsair fleet put out from their hidden base, every merchant ship in the Solar System would run for the nearest world."

Blaine nodded solemnly. "Yes, that is true. John Randall's name rang from Mercury to Pluto. For ten years he blazed a red trail across the System, and it was only when overwhelming forces cornered him that they finally destroyed him. And he died fighting, as he had lived."

"But what has John Randall to do with me?" Rand demanded. "Are you trying to change the subject, uncle?"

Philip Blaine looked at him, with misery and pity in his eyes. He said heavily, "John Randall was your father, Eric."

THERE was a frozen silence in the little cabin. Rand stared at his uncle, his dark young face petrified, his eyes incredulous.

"John Randall, the pirate, my father?" he burst finally. "But you always said my name was Rand, that my father was a merchant-ship captain!"

"I told you that," Blaine said sadly, "because you mother wanted me to. She didn't want anyone to know you were the son of John Randall, the notorious king of the space-pirates. She feared it would bring hate upon you, the same hate and fear the whole System had for your father. Dying, she begged me to keep your identity unknown to you and to keep you from ever going to space."

"But no one ever knew John Randall was even married!" Rand gasped.

"Your mother," Blaine told him, "was on a ship that John Randall captured. He fell in love with her. He took her to his secret base, like an old Viking corsair abducting his bride. And she came to love him and married him. She lived with him there a year.

"Then John Randall sailed out with his fleet, never to return. Cornered off Neptune, by vastly greater forces, he put up a terrific fight—and died. Your mother got back to Earth, a little later. Her heart was broken. She died after your birth—and I think she was glad to die. She had loved John Randall with all her soul."

Blaine looked earnestly at his nephew's wild, incredulous face.

"Now you know why I've kept you Earthbound, Eric. It's the blood in you I'm afraid of—the wild, reckless blood of John Randall. It's the call of that blood that has kept pulling you to space. But you've got to fight against it, you've got to keep out of space. Out there in the void, that dark, wild heritage from your father might be too much for you. There must never be a *second* John Randall in the System!"

"Then—I'm Eric Randall, not Eric Rand?" the younger man whispered stunnedly. "Eric Randall, son of John Randall?"

"Yes, Eric," his uncle said nervously. "But you must never tell that, you understand. His name would be a curse on you, if people knew."

Rand made no answer. His thoughts were seething crazily. He felt a hot, bursting gush of blood along his veins, a leaping emotion of pride. Yes, pride in his heritage, pride that he was the son of the greatest navigator and fighter that the System had ever known.

The man whose name had caused nine worlds to tremble—the man who had defied the whole System for years! Rand knew *now* from whence came that wild, burning urge to go to space that had long tormented him. It was in his blood; born in him.

CHAPTER II

Tragic Mystery

PHILIP BLAINE broke the strained silence. "Eric, this won't make any difference, will it?" he asked anxiously. "You'll still keep your promise to stay out of space?"

"Yes, uncle—I'll keep my promise," Eric Rand said slowly.

Blaine sighed with relief. "I have some of your father's papers hidden in the house," he continued. "Would you like to see them?"

"Of course!" Rand exclaimed eagerly.

The older man led the way out of the little cabin. As they emerged, old Andersen, the gardener, came up to them.

"Is anything wrong, Mr. Blaine?" the old man asked anxiously. "I heard you and Mr. Rand arguing again."

"No, no, Andersen — nothing's wrong," Blaine reassured him.

In the house, Blaine went to a section of the living-room chromaloy wall and touched a certain spot. A small, square secret panel—one whose existence Rand had never suspected—swung open.

Blaine drew out a metal coffer. In it were time-stained, yellow papers over which Rand bent eagerly. There were old letters, log-books, sailing-notes, all in the square handwriting of his father.

Two things interested Rand most. One was a little copper tube that looked like an ordinary ray-light. Its white beam jetted when he pressed its stud. On its side was scratched, "J. R." His father's! He put it around his neck by a cord, proud to have this souvenir.

The other thing was a sketchy map inscribed, "Western Hemisphere of Rhea." It showed only a few features, chief of which were two diverging mountain-ranges at whose junction was marked a tiny red circle.

"Why, this is a map of Rhea, that moon of Saturn they call the 'mystery moon!'" Rand said wonderingly. "Nobody ever goes there, they say. Why should my father have left a map of it?"

Then his eyes kindled. "There are stories that John Randall—I mean, my father—buried a huge treasure on some lonely world. Maybe Rhea—

Blaine shook his head. "There's nothing to those stories, Eric. A space-pirate doesn't bury treasure—he spends it."

"I guess you're right," Rand agreed. "Probably father had a fuel-cache on Rhea at some time."

He said "father" with such pride that Philip Blaine looked more anxious than ever. "Eric, you'll be careful not to let anyone know you're John Randall's son? You won't let even Moira Laird know?"

"No, I won't tell even Moira," Rand agreed. "But all the same, I'm not ashamed of my father."

Despite his promise of silence, Blaine looked after his tall young nephew worriedly late that evening, as Rand started toward the nearby Laird home.

Rand's mind tingled with thrilling excitement. He looked up through the trees at the calm bright planets swimming amid the summer stars, and thought of the long-dead day when his father had roared down the old space-trails between those distant worlds, of the day when his father's name alone had been enough to send ships flying for cover.

The Laird house glimmered a starlit silver cube through the trees. Here Captain Thomas Laird, old veteran of the Planetary Patrol, spent his years of well-earned retirement. And to this house, drawn by Laird's daughter Moira, Eric Rand had come almost

nightly for months.

Moira opened the door for him. She was small and straight, with a dark, proud little head, with candor and courage in her clear hazel eyes.

"Carl Lovering is here, Eric," she said doubtfully. "I hope you won't let his teasing annoy you tonight."

Rand stiffened. He disliked Lovering, not alone because of his easy, confident, self-assured way with Moira, but also because of the man's gibes. Lovering, a hard-bitten space-captain who ran supply-ships out to the dangerous planetary frontiers, seemed never tired of taunting Rand about his tame, earthbound life.

"His talk won't bother me tonight, Moira," Rand said buoyantly.

She looked at him surprisedly. "You look different tonight, Eric—excited—Has something happened?"

HE suppressed his desire to tell her of his discovery, but he was still eager with that buoyant excitement as he followed her inside. Captain Thomas Laird waved greeting from his chair, the old space-veteran's bronzed, stern face thawing in an indulgent smile.

"Hello, Eric. How is your uncle these days?"

Carl Lovering had got up from his chair. Broad-shouldered, big, with a virile, powerful face and intelligent, faintly sardonic dark eyes, Lovering looked the part of the domineering space-man—and knew it.

"Hello, Rand," he greeted, a negligent, half-amused contempt unconcealed in his manner. "How goes the bookkeeping these days?" Moira looked at Rand anxiously. But he only smiled. Lovering's taunts couldn't get under his skin tonight. Not after what he'd learned.

"Oh, the bookkeeping's the same," he said coolly, to Lovering. "Are you still ferrying supplies out to Uranus? Rather tame, isn't it?"

Lovering's black brows drew together in surprise. "Tame?"

"There wasn't anything tame about Uranus when *I* was with the Patrol," old Captain Laird declared. "It was the System's riskiest spot."

Rand asked the old veteran an eager question. "Captain Laird, you must have encountered John Randall, the pirate, back in those days?"

"John Randall?" boomed the old space-man. "I'll tell the nine planets I encountered him! That cursed space-devil shot one of our squadrons to pieces out off Jupiter, back in '87."

"He was a great pilot and space-fighter, wasn't he?" Rand asked eagerly.

"He was the scourge of space," old Laird admitted. "He could throw a ship around and gun you out of the void before you had time to see him. And he was a master-leader—he had those damned pirates fighting under him in a discipline as tight as that of the Patrol itself. No wonder it took us years and years to get him."

The veteran's faded eyes looked into memory. "I'll never forget that fight off Neptune when we got John Randall at last. We had him "boxed" and we outnumbered his ships six to one, and still that devil wouldn't surrender. He fought that ship of his with every compartment holed, fought till we finally blasted it to atoms."

Eric Rand glowed with suppressed pride. "John Randall was a great man, all right," he said fervently.

Captain Laird stared at him. "A great man? Nonsense! Randall was a fine fighter and navigator, but as a man, he was just another inhuman butchering space-pirate like all the rest of them."

Rand stiffened. "You must be wrong,

sir! All the stories say that John Randall never took life unnecessarily, never destroyed a merchant-ship without letting its crew escape in the space-boats, and never allowed any of his men to loot those who were themselves poor."

"Bah, those are just romantic stories they tell now," old Laird snorted. The veteran, with all the rancor that years had not erased, continued, "It's such stories, glamorizing a bloody criminal like John Randall, that help to keep space-piracy alive these days."

"I don't believe that John Randall was a bloody criminal, no matter what you say," Rand retorted hotly.

They stared at him in amazement. "Why, Eric," said Moira puzzledly, "it's nothing to argue about."

"No," said Carl Lovering mockingly, eyeing Rand closely, "there's no reason why you should defend that old space-thief."

"My father was not a thief!" Rand flamed. "He—"

Rand stopped. He saw, too, late, the stupefaction in their faces, and realized that in his resentment he had betrayed his secret.

"YOUR father?" Moira was whispering incredulously. "Eric, you can't mean that John Randall, the space-pirate, was—"

"He was my father, yes," Rand mumbled. "I never was supposed to tell anyone—I just found out today, myself."

Carl Lovering's eyes had narrowed to slits. Strangely, the space-adventurer made no comment as he stared intently at Eric Rand.

But Captain Laird rose to his feet. His hand was trembling with passion as he pointed to the door.

"If you're that devilish pirate's son, you can leave my house!" he bit out to Rand. "I'll not have John Randall's spawn in *my* place!"

"Father, please be reasonable," Moira pleaded distressedly. "It's not Eric's fault—"

"It's all right—I'll go, Moira," Eric said dully.

She followed him out into the starlight and clung to his arm, her white face troubled as she looked anxiously up at him.

"Don't mind father, Eric—he'll calm down," she promised. "It's the old grudge of the Patrol against John Randall that's made him unreasonable. He'll see that your parentage isn't your fault."

"I'm *proud* of my parentage—proud that I'm John Randall's son!" Rand said fiercely.

Moira's dark eyes shadowed with apprehension. "Eric, you mustn't let this discovery change you, as it's doing. Please!"

RAND'S MIND was seething as he walked back through the starlight to his home. He was beginning to realize how right his uncle had been, how heavy a burden his father's name might be now that he had revealed it. There were many in the System who would hate John Randall's son!

When he reached home, the cottage was dark. His uncle had retired, and old Andersen, the gardener, was in his own quarters behind the house. Rand was glad that he would not have to tell Philip Blaine until morning that he had given away the secret he'd pledged to keep.

He fingered the time-yellowed papers of his dead pirate father, and then put them back into the niche in the living-room wall. When he retired, it was a long time before he could sleep. Soon after, he awakened to hear in the dark a scuffle and a low groan.

"Uncle, what's the matter?" Rand

cried alarmedly.

There was no answer. He leaped from bed and hurried into the dark living-room. Then he stopped, appalled.

By the window, in a shaft of silver light from the rising moon, lay Philip Blaine, his head dabbled with fresh, dark blood.

"Uncle!" cried Rand agonizedly, bending over the still form.

He heard a rush in the dark behind him, and started to whirl around. He glimpsed a black figure with upraised arm—

Something hard crashed on Rand's skull and he fell senseless.

Light hurt his eyes when he returned to consciousness. His dazed gaze fell on the prone form and waxy, deathly face of his uncle.

"Dead!" he muttered dazedly. "Murdered—"

"You ought to know," said a harsh voice. "You murdered him."

Rand turned frozenly. There were police in the room, black-uniformed, bleak-eyed men staring at him. And old Andersen was with them.

"*I* didn't kill him!" Rand cried. He told what had happened.

"Pretty thin story," grunted the officer in charge. "This old gardener says you and your uncle have been quarrelling for months, that you were arguing only today. And he says when he heard a cry, he came running in and found your uncle dead and you pretending unconsciousness."

Rand could not speak. His eyes, frozenly wandering, noticed the secret niche in the wall wide open and empty, his father's papers gone.

"Thought you'd kill your uncle and then fake a robbery story to explain it, eh?" said the police officer. "Well, it won't go. You're under arrest for murder and I'm betting my last dollar you'll get the limit."

CHAPTER III

Lunar Prison

UPON the barren, rocky surface of the airless Moon, beneath the soft green glow of Earth, rested a thing like a gigantic bubble. It was an enormous, airtight glassite dome, two miles in diameter. In this bubble of air were chromaloy barracks, offices and mine-workings.

This was the dreaded prison colony of Earth. To this place, as to the Alcatraz of centuries gone by, were sent those whose crimes merited the extreme punishment. Here they toiled, digging out thorium and actinium ores during the twelve hour official "day," and penned in the gloomy-looking, guarded metal barracks each "night."

A whistle shrilled across the mine-workings and a stern-faced guard in the black uniform of the Planetary Patrol called loudly.

"Twelfth hour! Drop your tools and form up!"

Slowly, tiredly, the gray-clad convicts clambered out and lined up. They were a motley criminal crew—Earthmen, bald red Martians, slender Venusians, brawny Jovians.

Eric Rand, standing in line as the guards checked them, tiredly wiped perspiration from his forehead with a gritty hand.

"Tired, boy?" asked a deep whisper from behind him. "It's hard, this moon-gravity, when you're new here. But you'll get used to it."

It was a Martian who whispered, a tall, bony, grizzled man with a battered, hard-bitten face and ice-glinting eyes.

"I'll never get used to this hell, Nald Arkol," Rand muttered bitterly. "And I'll never forget those who sent me here."

"That's it, boy," whispered Arkol.

"That's the spirit. Keep thinking of revenge—it helps a man here, a lot."

"March!" loudly ordered the guard-captain.

The convicts' lead-soled moon-shoes shuffled toward the stockaded barracks at the far side of the great dome. Guards with atom-guns raised watched them vigilantly, alert to blast down any mutineer.

Eric Rand's eyes dwelled bitterly on the block-like metal buildings of the Prison Governor as he tramped past. The officers lounging outside its door in the green Earthglow, the men busy at the great air-lock through which supply-cruisers entered the dome, the stern guards who marched alongside them—he hated them all.

It was only three weeks since that tragic night of his uncle's death. The period seemed a nightmare to Rand. The trial, the evidence that he and his uncle had quarrelled over his desire to go to space, the reluctant but damning evidence of Captain Laird that he was John Randall's son—they all seemed a little unreal to Rand now.

It was Laird's evidence, the disclosure that he was son of the most notorious space-pirate in the System's history, that had clinched the case against him. "Like father, like son!" He had seen that thought on every face in court. He had seen it in Captain Laird's bleak eyes, and had detected the shadow of it in Moira's white face, even as she had tried to testify in his behalf.

Damn them, they had all prejudged him guilty because he was John Randall's son! They had listened in open unbelief to his frantic tale of the dark intruder who had struck him down, of the missing papers. And bitterest of all to Rand, when he was pronounced guilty and sentenced to hard labor for life on the Moon, had been to see Carl Lovering solicitously leading sobbing Moira from the courtroom.

"I'll show them!" he muttered savagely as he tramped on. "I'll show them that I'm John Randall's son, before I'm through."

THE gate of the high, close-barred steel stockade swung open. The convicts shuffled inside, across the bare compound, and into the gloomy, rectangular metal barracks-building.

Eric Rand heard the guards locking the barracks-door. He went to the barred window and watched the guards leave the stockade, lock its barred gate, and turn the lethal electric current into the barrier.

They would leave the moon-dogs out now, Rand knew. He could hear the scratching, eager clamor inside the strong steel pens out in the compound. Then the pen-doors swung open, by remote control outside.

"There they come, the c u r s e d beasts," muttered a Venusian convict at the window beside him, as a hissing clamor split the air.

"As though we weren't locked up tight enough, without them using those little monsters to make sure of us," Rand said bitterly.

The moon-dogs were pouring out of the pens and racing around the compound between the barracks and electrified stockade. They were small, gray-scaled, massive beasts with six short legs and large, blunt heads with wide jaws of enormous fangs. The beasts were native to Phobos, moon of Mars, and were so utterly ferocious and bloodthirsty that their presence in the compound was an absolute guarantee no convict could escape.

A hand tapped Rand's shoulder as he stared somberly at the sniffing, hissing, prowling beasts. He turned. It was Nald Arkol.

"Boy, if we could find some way to

get through those creatures, we might have a chance of escape," the grizzled Martian declared.

Rand laughed mirthlessly. "Escape from here? You're moon-struck."

Arkol stared at him. "It's not like the son of John Randall to give up so easily. Your father wasn't that kind."

Rand started. "You knew my father?"

A grim smile crossed Arkol's hard visage. "Aye, I knew him. I was his right-hand man twenty-five years ago, when John Randall was a name that would make fat merchant-skippers shiver. If I'd not been captured, and sent here for life, I'd have fought in his last battle."

A deep glow lit the Martian's icy eyes. "Ah, those were the great days, when a hundred pirate ships followed John Randall on our forays. And he himself leading the way in every fight, with atom-guns blazing and a laugh on his lips. Yet it was only the tyrants. the exploiters and oppressors of the planetary natives, that he preyed on."

The Martian looked at Rand. "I can't believe John Randall's son would murder his own uncle, as they charged. You didn't, did you?"

"No, I didn't," Rand said broodingly. He told his story. "Whoever killed uncle was after my father's papers, and got them. I think the killer believed the secret of John Randall's treasure was in them."

Nald Arkol looked thoughtful. "We pirates always believed your father had hidden treasure somewhere. He'd go off in a one-man cruiser with his share of the loot in rare gems and metals, and come back without it. Have you any idea who killed your uncle to get that secret?"

"I have now, for I've had time here to think," Rand said grimly. "It could only be Carl Lovering—a space-man who heard me admit that night that I was John Randall's son. I believe he followed me home, saw me put my father's papers back into their hiding-place, and was stealing them when my uncle surprised him. But I was so dazed through that short trial I didn't think of that, and I couldn't prove it anyway, then or now."

"You could get this Lovering by the throat and make him confess it, if you could get back to Earth!" Arkol exclaimed.

"Yes, *if* I could get to Earth," Rand said dully. "They'll never pardon John Randall's son; and there's no escape from here."

"A supply-cruiser of the Patrol comes here every fortnight—one is coming tonight," Arkol reminded him. "These other convicts would help us seize it and escape in it, if we could get outside the stockade."

ERIC RAND felt a queer throb of excitement, a hot thrill at the faint hope of getting Carl Lovering, of choking him till he confessed—

"You said we might escape if we could find a way through the moon-dogs?" he asked the grizzled Martian, with dawning eagerness.

Arkol nodded, downcast. "Yes, the damned moon-dogs are the stumbling-block to my plan. For months, I've had a way to get out of the barracks here, and to open the stockade gate. But the cursed beasts out there would tear us to shreds before we even reached the stockade."

Eric Rand began to pace back and forth excitedly, his dark face flushed. He had felt hopelessly resigned to imprisonment here, until this faint chance of escape. Now a consuming eagerness possessed him.

"There must be *some* way to get through the beasts," he muttered, look-

ing out at the scaled gray animals as they prowled the compound.

Arkol shook his bald head. "I've figured for months, and there just isn't any way. Those creatures attack and kill on sight."

Rand turned, his narrowed gaze sweeping the interior of the barracks in desperate search for inspiration. The other convicts had finished their meager supper, and were wearily retiring to their bunks.

"The bunks!" Rand exclaimed sharply. "By the nine planets—"

He jumped toward his own bunk. Arkol stared puzzledly as Rand feverishly inspected the rubberoid pad and the woven wire bunk-spring.

"It could be done!" Rand cried tensely. "Arkol, I think I've a way to get through the moon-dogs, if you can get the barracks-door open!"

Arkol's jaw dropped. "Why, boy, I can't believe it. I—"

Rand turned from him. His black eyes were flashing as he spoke in low, vibrant tones to the forty-odd convicts in this barracks.

"Men, a Patrol cruiser docks through the dome air-lock tonight. If we could seize it, we'd be able to escape the Moon. Will you try?"

Dull, hopeless faces met his appeal. Sin Grih, a swarthy, fiery little Mercurian, answered for them all.

"You're moon-struck, Rand! There's no escape from this place."

"Arkol has a way to open the barracks door," Rand crackled, "and I have a way to get through the moon-dogs to the stockade gate. We can do it, if you'd rather risk it than toil away your lives here. Will you?"

Faint gleam of hope began to light haggard faces. The motley criminal crew began to gather excitedly around Eric Rand.

"It's crazy—nobody ever escaped here," one big Jovian said.

Sin Grih spoke up. "If anybody could pull it off, John Randall's son could," snapped the little Mercurian. "I say, let's try it!"

The Mercurian criminal carried the rest of the convicts. Low, eager whispers of assent went up from one prisoner after another.

"Good!" Rand exclaimed. He shot orders. "Arkol, start getting the barracks door unlocked. The rest of you, unweave the wire of two bunk-springs, and tear strips of rubberoid off the bunk-pads."

They stared, baffled by his orders, but they obeyed. Rand supervised the feverish work as they toiled in the green, dusky glow.

An hour later, Rand's supervision had produced what he wanted—four long, thin rods of twisted wire, long enough to reach the stockade, with a hook at one end and a wrapping of rubberoid at the other.

He hastened to the door. "Got it unlocked yet, Arkol?"

"Yes," Arkol answered, bobbing his bald red head. He showed a tiny steelite instrument. "Made this months ago, for the purpose."

Rand gently laid his hand on the knob of the unlocked door.

"Don't open that!" cried Arkol in alarm. "We'll have the moon-dogs right in here with us, tearing us to bits!"

Rand explained. "I want some of you men to go to the opposite windows, and make a stir there to draw the moon-dogs around to that side."

"Is that your plan?" Arkol said dismayedly. "It'll never work—the moon-dogs will hear us as soon as we go out into the compound, and will come around after us like lightning."

"There's more to my plan than that," Rand rapped. "Do as I say!"

As the men hastily obeyed, Nald Ar-

kol chuckled. "Sounded like your father on the bridge of the old *Spacehawk* just then, boy. Now what?"

RAND waited tensely till he was sure the moon-dogs had all raced around to the other side of the barracks, lured by the noise there. Then gently he opened the barracks door a trifle.

Softly Rand reached out one of his long, thin wire rods, holding it by the rubberoid-wrapped end. Its other end touched the stockade, to the right of the gate, and hooked over the electrified steel bars. Rand fastened his end tightly to the barracks door-frame, and then as carefully extended another rod, hooking it over the stockade to the left of the barred gate, and fastening his own end tightly also.

He now had two strong, thin rods, running a foot above the ground and five feet apart, from the barracks door to the stockade-gate. He repeated the performance at a higher level. Then, tensely, he took a shorter length of wire and dropped it across the two bottom rods. There was a little flash of electric force as it made contact. Again, the upper rods this time. The job was done.

"The current in the stockade is now flowing through our make-shift fence of wire rods, to the gate!" Rand exclaimed. "It should keep the moon-dogs off us. Come on!"

The convicts hung back. "If the beasts get through it at us—"

"Want to stay and labor here fifty more years?" hissed Arkol.

It decided them. They followed Rand as he stepped softly out. He moved silently—yet he had gone no more than five steps toward the stockade gate, between his charged rods, when the moon-dogs heard.

With hissing, blood-chilling cries, the scaled gray beasts came charging around the barracks. They hit the wire rods—and recoiled with yelps of agony!

"It works!" Rand cried. "Hurry, Arkol! There's no time to lose!"

They raced toward the stockade gate. Maddened at the sight, the bloodthirsty little gray beasts charged again, and again were knocked back by the high-powered current flowing through the improvised fence.

At the barred gate of the stockade, Nald Arkol worked feverishly with a rubberoid-wrapped, pincer-like tool of crude design.

"Had *this* ready for months too," he panted. "Ah, that's got it!"

He had forced the lock of the stockade gate. He pushed it open, carefully avoiding direct contact, and they streamed out, and he closed it.

They paused there in the soft glow of huge green Earth, a wild, haggard-looking crew. There were no guards in sight—the fierce moon-dogs were all the guards the prison-compound had ever needed.

It was the twelve-hour official "night," and most of the prison colony slept. But far off by the north edge of the dome, a few men were visible moving around the big ship-lock.

"Getting ready to let in the Patrol supply-ship," Arkol whispered. "That means it'll be here soon, boy."

"Follow me, in small bunches," Rand ordered sharply. "Keep in the shadow wherever possible. Make no sound."

Thus his desperate band approached the ship-lock. Crouching near it behind the shadowing concealment of a supply-house, they eyed the half-dozen men who were now lounging waitingly at the lock.

THE lock was a big, square projection jutting from the wall of the dome—a simple air-lock but one big enough to admit a ship. Its huge upper

door was open to space—the door into the lock closed tight.

"We'll have to wait till the cruiser is actually in the lock, and the upper door shut and air pumped in," Rand said swiftly. "Then we'll rush in, grab the ship, and smash out before they can turn their cyclotrons off. We've got to agree on a pilot, and an engineer."

"Guess I can still pilot a space-ship," Nald Arkol declared.

"I was engineer for a big liner till I got tangled up in a clumsy insurance wrecking plot," said Sin Grih, the Mercurian, eagerly.

A big, fat Uranian convict named Grugo grinned and said, "I was gunner for your father, Randall. Maybe you can use me, too."

"There comes the cruiser now!" hissed Arkol suddenly.

It was dropping out of the starred vault of space, with keel-tubes blasting to brake its fall—a long, torpedo-shaped, swift-lined cruiser with the emblem of the Patrol on its bows.

It fell smoothly toward and into the air-lock. One of the lock-men on duty pulled switches. The great upper door swung down shut, and air began to hiss from big tanks into the lock. Rand and his men watched tensely. Then they saw the lock-master cut off the air flow.

"Air okay! Open her up!" they heard him calling. In response, the door of the cruiser inside began opening.

"Now!" Rand cried.

With a fierce yell, the gray-clad convicts sprang from their hiding. They battered aside the astounded lock-men and poured into the great lock itself, toward the cruiser's opening door.

Eric Rand was in the van of that charge, and he faced the first emerging Patrol officer. Startled, the officer ripped out his atom-pistol and fired. The shell whizzed past Rand's ear as he ducked and leaped, and his fist smashed the officer's chin and knocked him back. He and Arkol and the other convicts poured into the cruiser.

Rand glimpsed other Patrol men running along the ship's main corridor to them. Another atom-shell flicked past him, and its bright explosion sent two convicts behind him falling, scorched and dead. But the ten-man crew of the cruiser hadn't a chance against forty yelling demons lusting for liberty. In two minutes, they'd been overpowered.

"Sin Grih, down to the cyclotrons!" Rand shouted. "Grugo, close the ship's door! Arkol, you and I to the bridge!"

As fat Grugo ground the ship's door shut, they could hear a rising, distant clamor of alarm from within the prison-dome and could glimpse guards running frantically there. The door shut, cutting it off.

"Alarm's out!" Arkol was panting. "We got to get away quick!"

Before Rand and the Martian, as they made for the bridge, appeared an approaching figure. Rand crouched to lunge—then froze.

This wasn't a Patrolman who faced him in the dusky corridor. It was a passenger on the cruiser, a shocked, pale, terrified girl.

It was Moira Laird.

CHAPTER IV

Pirate Moon

RAND petrifiedly faced the girl. He heard Nald Arkol plunging past them to the bridge, but he himself could not move.

"Moira!" he uttered stupefiedly. "God God, what are you doing on this cruiser?"

She faced him steadily, but her face was pale and in her clear dark eyes was a shadow of pain and an accusing look.

"I came to the Moon to see *you*, Eric," she whispered. "I believed all along that you were innocent of that murder—they wouldn't let me see you during the trial to tell you so, but I never doubted it. And I finally persuaded father to get me permission to come here on this supply-cruiser, for I wanted to talk with you, help you prove your innocence."

Her voice vibrated with passion. "And when I land here, I find you leading a criminal revolt, Eric. An innocent man wouldn't do that, wouldn't incite these convicts to rebellion! You're not innocent and you never have been. I've been a fool!"

"Moira, listen—" Rand exclaimed frantically.

The thunder of the cruiser's keel rocket-tubes interrupted, and the lurching of the craft as it rose in the big closed air-lock made both him and Moira sway on their feet. Wild yells came from below.

"Moria, I *am* innocent!" Rand cried wildly. "It was Lovering who killed uncle, I'm sure of it! And I've only led this break for freedom so I'd have a chance of proving it!"

Nald Arkol's shrill voice came down from the bridge in an urgent cry, over the thunder of rocket-tubes. "Boy, come up here quick!"

"So you accuse Carl Lovering, now?" Moira was saying bitterly. "Just because you've always disliked him—adding lies to murder! I see now Carl and father were right—you've wild, killer's blood in you!"

Arkol's frantic yell came again from above. "Boy, we're trapped in the lock!"

Desperately, Rand tore his eyes from the girl's white, accusing face and plunged up the short stair and into the wide, transparent-walled bridge-room.

Nald Arkol was hunched at the controls, his hands on the bank of rocket firing-levers. The Martian was keeping the keel-tubes blasting, pressing the whole bulk of the cruiser against the shut, big upper door of the huge air-lock, in an effort to force it swinging open.

But the massive catches of the air-lock door were holding. And down there inside the prison dome, guards were hastily donning space-suits so that they could enter the lock and attack the ship with atom-guns.

"We're caged in this damned lock and I can't force the door!" Nald Arkol cried. "They'll be in here, crippling us in a minute!"

"Let the ship drop a little and then come up against the door with a rush!" Rand exclaimed. "It might break the door-catches."

Instantly, the grizzled Martian obeyed. As his hands flicked the firing-levers, the cruiser sank back toward the floor of the airlock.

Grugo, the fat Uranian pirate gunner, came scrambling up into the bridge. "What the hell are we dropping for?" he gasped. "If we don't get out of here now, we're done—the dome-guards have had time to man the batteries of heavy guns around the dome, and they'll blast us!"

"Hold tight!" Rand flung at him. "Let her go, Arkol!"

The Martian slammed down the firing-levers of all keel tubes. With a dizzying upward rush, the cruiser rose vertically.

Crash! The impact against the air-locks upper door was so terrific that Rand thought for a moment the cruiser had been wrecked. He glimpsed Nald Arkol flung hard against the floor, as he clung to a stanchion for support. The Martian was half-stunned—

"We're out!" Grugo yelled. "But

there go the batteries—and nobody at the controls!"

The cruiser had snapped the catches of the airlock door, had forced the swinging door upward and open, and had burst into space.

But with Arkol no longer at the controls, the cruiser was beginning a crazy, spinning "keel roll" low above the Moon. And the heavy batteries of big atom-guns that were part of the prison dome's fortifications were opening up hotly on the ship.

Atom-shells were bursting all around them, exploding in blinding flares of destroying energy. Only the crazy, unpredictable spinning of the cruiser saved them. But when the guns got to them—

ERIC RAND acted without conscious decision. Arkol was still half-stunned, trying to get to his feet, and Grugo had been wedged in a corner by the shock. Rand dived for the controls, and his hands moved with instinctive, lightning speed over the firing-levers.

Click—*roar!* Click—*roar!* As the click of each lever was followed by the thunderous explosion of rocket-tubes in the stern and sides, Eric Rand knew that those long, long months of practise with dummy controls and instruments had not been fruitless! He was bringing the ship out of its spin.

He sent the cruiser zooming upward from the Moon, slamming down all stern rocket-tube levers. Up into the green glow of great Earth they climbed in a swinging sweep, space about them seeming clogged by force-flares as the guns below frantically sought to reach them.

Yells of triumph came from the convicts below. Nald Arkol had gained his feet, and was shouting exultantly.

"We're clear, boy!" he cried. "We're out of range now!"

It was true, Rand saw. The last atom-shells were bursting far below them. The swift Patrol cruiser, with every rocket-tube blasting backward, with its cyclotrons straining in thunderous drone, was rushing out away from the Moon at a terrific rate of acceleration.

Sin Grih, the little Mercurian engineer, burst into the bridge, his eyes blazing.

"You got us out, chief!" he cried to Rand. "By the sun, you're John Randall's son all right!"

"It's—it's the first time I ever piloted a space-ship," Rand said shakily. "Take over, Arkol."

As the Martian took the controls, Rand ordered, "Head for Earth."

They stared at him incredulously. "Earth?" cried Arkol. "Hell, no! We wouldn't have a chance to slip the Patrol if we headed that way!"

"We've got to do it," Rand insisted. "There's a girl on board who has to be landed safely there before we do anything else."

"Are you going to run our necks into sure capture for some slip of a girl?" Sin Grih flared. "Why, every man on board would mutiny if we tried it!"

"Listen to this, chief!" Grugo called to Rand.

The fat Uranian had switched on the telaudio receiver in the bridge. The instrument, tuned to the official Patrol wave, was shouting.

"—of the Lunar Prison Colony, calling all Planetary Patrol ships and bases! Patrol Cruiser 991 has just been seized by convicts and is making a break into space. All Patrolmen aboard are prisoners on it."

An instant later came a sharp, urgent new voice. "Patrol Headquarters on Earth, to Lunar Prison Colony: Warning received."

Then the sharp, rapid voice continued. "All Patrol cruisers within the third quadrant between orbits of Venus and Mars converge toward the Moon. Your mission is to capture or destroy Cruiser 991!"

Grugo swung around. "Hear that, chief?" he cried to Rand.

"You just *can't* head for Earth!" Arkol told Rand. "Our only chance is to run for Jupiter—there's hidden pirate colonies on most of its wild smaller moons. We'll be safe on one of 'em if we can make it."

"But Moira—the girl aboard!" Rand cried. "I've got to see that she's safe!"

"You can send her back to safety, once we're safe ourselves," Arkol assured him. "But it's all up with us if we touch any civilized world."

Rand sinkingly realized that it was the course he must follow. He knew Sin Grih was right, that the convicts, wild over their new freedom, would mutiny if he tried to take the ship to Earth. And that would mean that Moira would be in even greater danger.

"All right, head outward for Jupiter," he ordered heavily.

"Outward it is!" cried Nald Arkol jubilantly. "Ah, it's like the old days again—a good ship blasting spaceward with all rockets, and freedom and fun ahead and the Patrol behind!"

RAND went down to the corridor in which he had left Moira Laird. She faced him, her dark eyes bitter.

"Well, what do you pirates do with prisoners like me?" she asked. "Will I be locked out now?"

"Moira, don't talk like that—I'm no pirate, and no murderer either," Rand pleaded. "Can't you believe I'm innocent of that charge?"

"I *did* believe, till you showed me how wrong I was by this piratical feat of yours," she flared.

"Moira, I wanted to land you on Earth but the men won't take the risk," he said earnestly. "We've got to head for Jupiter. But once the men are safe on one of the moons there, I'm going to bring you back to Earth myself—and I'm going to make Carl Lovering confess his guilt."

"I don't believe you," Moira said stonily. "You're breaking for space and a pirate's life as your father did, years ago. And you're taking me with you, as any pirate would. But sooner or later the Patrol will catch up to you, and you'll die then as your father died."

Rand saw the uselessness of further reasoning with the girl while she was in this mood. He took her to a small officer's-cabin.

"This will be yours, Moira—no one will molest you," he promised.

As she closed the door sharply in his face, Rand heard a chorus of wild, jubilant yells from the lower deck. He hurried there.

Most of his hard-bitten convict crew had gathered there, and were dragging the bound forms of the ten Patrol officers and men toward the inner door of the ship's airlock.

"What's going on here?" Rand demanded.

"You're in time to see the fun, chief!" cried a scarred-faced Earthman convict flourishing a captured atom-pistol. "We're going to lock these Patrolmen out—it'll be nice seeing them freeze in space."

Rand snatched the gun from the convict's hand. "Take those prisoners and put them in a supply-room!" he thundered. "By god, there'll be no slaughter of helpless captives while I'm in command!"

Dashed, the men a little sullenly obeyed. Rand heard a little laugh behind him and turned to find Grugo, the fat, yellow Uranian.

"Just like your father, chief," grinned the Uranian. "He always was dead set on discipline and clean fighting."

Rand went up to the bridge. He tried to get Moira's white, scornful face out of his mind as he peered with Nald Arkol into space.

"The telaudio's been going, boy," said the grizzled Martian. "The Patrol's wild over our capture of this ship, and they'll go to any length to nab us before we can slip through the asteroid zone."

"It'll take ten days at the fastest speed of even this swift ship, to make Jupiter," Rand muttered. "We daren't try a straight course. Swing around toward the Earth-Mars shiplane and let ourselves be seen by one or two merchant ships. The word'll go out that we're on a foray to loot the Martian trade. The Patrol will be drawn in toward the ship-lane, and we can slip past them, if we're lucky."

"Good figuring, boy," nodded the Martian approvingly. "We'll do it!"

As Arkol changed course, Rand stood peering somberly into the star-blazing vault of space through which they were flying.

Somehow, this all seemed familiar to him. Could it be inherited memory that made it seem that he had stood like this before on the bridge of a flying space-ship, with danger ahead and behind and all around?

His hand fingered the little copper tube that hung around his neck, the odd little raylight that was his only souvenir of his father, and that he had managed to keep through his trial and imprisonment. What would that dead, mighty father of his do in a position like this?

Rand's face hardened. He knew what *he* was going to do. Once his men were safe on one of Jupiter's moons, he'd come back to Earth with Moira and make Carl Lovering tell the truth. He was absolutely certain that it was Lovering who had killed his uncle and stolen that map of Rhea which might give the location of John Randall's hidden treasure.

"But as it is now, Moira thinks me guilty," Rand told himself miserably. "If I could only make her see that I *had to escape to prove my innocence—*"

RAND had no chance to convince Moira, in the next week. For the girl refused to leave her cabin, or speak to him. And also, they were hard put to escape the web of Patrol cruisers now combing space for them.

They had escaped the first converging cruisers by Rand's ruse of making a feint at the Earth-Mars space-trade. That had drawn in the Patrol ships and let them slip past Mars' orbit. But the ruse was discovered, and the Patrol ships came fiercely after them as they threaded past the dangerous zone of whirling asteroids inside Jupiter's orbit.

Standing in the bridge at the controls upon the tenth day since their escape, Rand listened with Arkol and Grugo to the telaudio calls.

"Still way behind us," Arkol grunted in satisfaction. "We're going to make Jupiter all right—this ship is fast as any of theirs."

"Which one of Jupiter's moons do you want to head for?" Rand asked, as he watched the gleaming white planet grow larger ahead.

Rand had stood trick at the controls many hours during these past ten days, and the reinforcing of his deep ground-training by this stern experience had already made him into a skillful space-pilot. He had found that skill in maneuver seemed to come to him instinctively.

"Well," Nald Arkol was saying, "there's pirates on most of the smaller

moons. One of the two biggest is the band of Dordemos, on the moon Thrann. I don't know Dordemos—he come up since I was in prison."

"I know Dordemos and he's the blackest brute that ever disgraced the name of pirate!" Grugo declared. "Better head for the moon Kerek, John Randall's old lair—there's a big pirate colony there with a Jovian named Horruf at its head. He needs recruits, and he'd welcome us."

"Kerek it is, then," agreed Eric Rand. "You say it was my father's old base?"

"Yes, and well I remember it," nodded Nald Arkol. "It'll be good to see the Moon of Flowers again, after all these prison years!"

Moon of Flowers! Rand saw the reason for the name as he dropped the cruiser toward the little world.

Kerek, as this one of Jupiter's six smaller moons was called, was a very small world whose low gravity and odd chemical atmospheric make-up had combined to stimulate a giant flora unmatched in the System.

Gigantic green stalks of moon-lilies rose for a hundred feet, bearing colossal white blooms. Cabbage-like flowers of brilliant red nodded on massive stems thirty yards from the ground. This little world was a welter of unbelievably enormous flowers of every hue, that towered up in a dense, fairy-like forest of vivid colors.

" 'Round toward the other side a little," Grugo was directing Rand. "Now veer north toward those thick lilies—now hold, and drop her!"

As Eric Rand obeyed, he was realizing why the space-pirates had held sway on these wild moons so long. It was all the Planetary Patrol could do to maintain order among the more civilized inner worlds. Out here on these jungle moons, out here where the planets themselves were almost lawless, it would be impossible to hunt out and attack the pirates in force.

"Blast your keel tubes six times as you drop," Grugo was saying.

"Yes, the old pirate signal," chuckled Arkol. "We don't want 'em gunning us because we happen to have a Patrol ship."

Rand gave six quick thunderous blasts of the tubes, as they fell. Down through the colossal, towering moon-lilies they dropped, brushing green fronds and huge white blooms aside, into a hidden clearing.

Metal huts crowded in a little village in this clearing. And around them lay scarred, battered pirate space-ships—everything from captured liners to two-man scouts, the sides of all bristling with atom-guns.

As they landed, a motley pirate horde representing men of every planet came streaming to them, led by a brawny green Jovian.

Rand went down and ordered the ship door opened. He found Moira Laird by his side, looking out bitterly at the savage scene.

"You've come home to your own, Eric," she said scornfully.

He ignored the taunt. "Stay with me, Moira, and you'll be safe."

They emerged into warm, thin air laden with overpowering fragrance from the giant flowers that nodded in the pale sunlight overhead. The brawny green Jovian pirate-chief confronted them, small eyes suspicious.

"We've come to join you, Horruf!" Grugo told the Jovian leader. "Forty fine men, just escaped from the Lunar Prison ten days ago."

"Good, I need recruits!" rumbled Horruf. "That devil Dordemos is getting too strong to suit me, and I'm planning to trim him down and see he doesn't hog all the loot in the System as he's trying to do."

Rand saw the Jovian leader's pig-like little eyes fasten on Moira. "Does that wench belong to one of you?" Horruf demanded.

"Of course I don't!" Moira snapped. "I'm a prisoner."

"Good! I'll take you as my own wench," Horruf declared. "My own woman died not long ago."

Rand bristled. "You're not taking this girl!" he flared.

Horruf stared at him, anger rising on his brutal green face.

"What's going to stop me, Earth-cub?" he roared. "I'm chief here, and my word is law on Kerek. I say the wench comes to me!"

CHAPTER V

Space Duel

RAND felt an icy, unfamiliar anger grip him—a cold hard rage such as he had never felt before. His dark face was bleak and set as he spoke to Horruf, who was swaggering toward shrinking Moira.

"Let the girl alone," Rand said in a low, taut voice.

Horruf stopped. The Jovian's small eyes flared red. "Are you trying to talk back to me, the chief?" he bellowed. "Gun him down, boys!"

Some of Horruf's pirates drew their atom-guns. But Rand stopped them by his sharp exclamation.

"Listen—by pirate law you're the chief here," he exclaimed to the Jovian. "But I seem to remember that it's pirate law that any man can challenge the chief to fair fight in space-duel, and be chief if he wins."

"That's right!" said Grugo, the fat Uranian. "That's pirate law!"

A murmur of assent went up from the motley interplanetary corsairs. Rand said, "I *am* challenging you, Horruf!"

Nald Arkol whispered frantically to Rand. "Boy, you don't know what you're doing! You've become a fine space-pilot in these last days, but Horruf's one of the deadliest space-fighters in the whole System!"

"It's the only chance to assure Moira's safety," Rand muttered.

Horruf was guffawing. "So you challenge me? You, a raw new Earth-cub? Why, I'll enjoy splattering you all over space!"

"Don't be so sure, Horruf," said Sin Grih, the Mercurian engineer. "This Earth-cub happens to be the son of John Randall."

An exclamation went up from the throng. The name of that mighty outlaw of the past made them look at Rand with new, respectful eyes.

"So much the better!" bellowed Horruf. "I always hated John Randall, years ago. It'll be good to blast his son out of the sky. We'll start now—get two two-man cruisers ready there for the duel!"

Hastily, two of the swift little torpedo-shaped cruisers were made ready. Rand found time to speak urgently to Nald Arkol.

"Arkol, if I don't come out of this, try to get Moira away before that devil can get her," he begged. "Will you do that for me?"

"I'll sure try," said the Martian mournfully. "But I wish you weren't committing suicide this way."

Rand grinned tautly. "I always wanted to be a space-fighter."

"The cruisers are ready!" yelled one of the motley throng.

"Good!" roared Horruf. "We'll take off in opposite directions, rocket around Kerek and meet on the other side of this moon. And we'll meet with atom-guns blazing, Earth-cub—you'll live about a minute!"

Rand made no answer. He flung a

glance at Moira's pale face, as he strode toward the little ship awaiting him, and entered.

He put on a space-suit, and took the pilot's seat. The cyclotrons in the back were already humming. In front of him, beside the standard controls, was the foot-trigger of the rapid-fire atom-gun whose slender, black snout protruded from the prow of the little ship.

Flash! A pirate outside fired an atom-pistol as starting signal. Instantly, Horruf's cruiser darted up from the ground, eastward.

Rand slammed down the rocket firing-levers, and felt the ship under him zoom up headlong through the towering, gigantic lilies. He headed westward, running at low altitude around the Moon of Flowers.

Rand's thoughts were chaotic. He knew death hovered close. This pirate he had challenged was a veteran space-fighter. Yet he had had to take this chance to assure Moira's safety, for it was he who had, unwillingly, brought her into this peril.

Roaring around the little moon, low above the giant flower-jungle, Rand estimated that he must be nearly half around the sphere—

Scree-e-e-e! Thin shriek of roaring rocket-tubes hit his ears, screaming down at him from above. Rand's hand smashed the levers of keel and stern tubes, in instinctive reaction.

His cruiser flashed up in a giddy zoom, and he glimpsed little atomic flares of light bursting blindingly in the space his craft had just occupied. Horruf had come around the moon at high altitude and had dived on him!

Rand slammed down a lateral-tube lever, and sent his craft banking sharply around in space. Horruf, with the skill of long experience, had brought his ship out of its swoop and was coming up at Rand in a "corkscrew zoom," a bewildering, rapidly rising spiral.

"No, you don't!" Rand muttered fiercely. "You don't get on my stern if I can help it—"

THE stern of any space-ship was its most vulnerable spot, for there were bunched the stern rocket-tubes that were the most important part of the craft. Cripple those, and a ship couldn't fight.

Rand swung around in a wide loop to get under Horruf, and as he sighted the Jovian's craft through the aiming-ring in the window, he pressed his foot down savagely on the pedal-trigger.

Atom-shells, tiny cartridges of death, flicked from the snout of the atom-gun in front of him. In space-fighting, where ships are moving at tremendous speeds, rate of fire is more important than caliber. Rand's gun vomited thousands of the tiny shells in a minute.

But they missed! Horruf flung his ship sidewise with a crazy blast of lateral tubes, did a lightning "keel-spin" half around, and came rushing onto Rand's stern. The shells he'd fired, not hitting their target, burst automatically at various distances, in flaring force.

Rand was sweating. "That devil—he's all over space! Where the hell is he now?"

Scree-e-e-e! The shrieking, ominous scream of rockets buzz-sawed his ears through his space-suit, from close behind.

Rand went into a frantic zoom at once, but too late this time. Atom-shells flared as they hit the upper back of his craft, missing the vital stern tubes but blowing a hole through the ship wall.

Puff! The air went out of Rand's ship in a split-second. He was unaffected, for he wore the space-suit as all space-fighters always did before going into action. But if his craft was weak-

ened further—

"Got to get him quick, or he'll get me!" Rand thought desperately. "Only one chance—a dive and reverse space-spin—"

It was a maneuver of which he had read, but had never tried in his short piloting experience. Crazy, to think he could succeed in that hazardous strategy! Yet it was that or nothing, now—

As he thought this, Rand was zooming up through space in an asymmetrical spiral to keep Horruf off his stern, while the Jovian was hotly pursuing and trying to bring his gun to bear, to blow away Rand's stern tubes and thus cripple him and finish him at leisure.

The Moon of Flowers was a dull green ball underneath, and across the starry heavens overhead bulked the colossal cloudy white sphere of Jupiter, its Red Spot like a great eye watching the battle.

Rand tensed himself, set his teeth, and suddenly smashed his firing-levers and sent his craft hurtling over and downward in a wild dive straight down toward the moon below, as though in effort to escape.

Horruf took the bait! The Jovian, who might have suspected a ruse in a more experienced fighter, apparently thought Rand frightened. Rand saw the moon below rushing up toward him as he dived at full rockets, just waggling enough to keep from making a target for Horruf.

Then, barely fifty miles above the moon and with Horruf close behind, Rand fired the nose or braking-rockets and the keel rockets. His craft bucked in space, the deceleration brought blood roaring to his brain as his ship came up and around in a short loop or "space-spin."

The maneuver brought him momentarily *behind* Horruf. Before the startled Jovian could spin out of line, Rand's foot pressed the trigger and sent a stream of shells that exploded in a continuous blinding flare against the stern and keel of the other's craft.

Horruf's ship, disabled, cometed on down toward the moon. In a few seconds, it crashed into the flower-jungles, and a brilliant flash of blazing energy showed where its cyclotrons had exploded.

Rand found himself shaking as he brought his own craft back on a level. "One chance in a million—and I made it," he muttered.

WHEN he landed a little later in the pirate village, beneath the gigantic towering lilies, Arkol and the others ran toward him.

"By the nine worlds, boy, you did it!" yelled the Martian, clapping his back. "We saw it—that reverse space-spin was a beauty!"

"Aye, John Randall himself never did a better!" Grugo cried.

Rand walked unsteadily through the yelling, excited pirates toward Moira Laird. The girl's face was very white, her eyes bitter yet.

"I am your chief now, by pirate law, am I not?" Rand called to the pirates gathered around. A roar of approbation went up.

"That you are, John Randall's son!"

Rand took Moira's wrist. "This girl is mine, understand?"

All shouted assent. Moira looked at Rand with loathing. "So you've become a full-fledged pirate now?" she said.

"Moira, I'm only doing this to protect you from the others," Rand told her earnestly. "It's why I had to fight Horruf."

"You enjoyed that fight—you *like* this life," she accused.

It was partly true, Rand realized guiltily. There *was* something wild and blood-stirring and alluring about this

lawless life.

"I'm not going to be a pirate, really," he protested to her. "As soon as I can, I'll take you back to Earth, and get hold of Carl Lovering there and make him confess to that murder. And then—"

Nald Arkol, who stood beside him, interrupted. "Boy, that fellow Lovering you're after isn't on Earth—he's at Thrann, the moon out here where the pirate Derdemos has his base."

"What?" Rand cried, startled. "How do you know?"

Arkol pointed to a pirate nearby, a scrawny Saturnian. "That man is a spy Horruf sent recently to get information about Derdemos' band. Horruf planned to attack Derdemos, you know —they were deadly rivals and enemies. That spy, who just got back here before we arrived, tells me a space-captain, an Earthman named Carl Lovering, has been at Thrann hatching up some kind of plan with Derdemos."

Moira Laird heard and her eyes flashed. "Carl came out here to rescue *me*, then! That's what he's planning with Derdemos!"

Her voice throbbed with faith. But Rand frowned.

"I don't believe that," he muttered. "Lovering couldn't have followed us that closely."

Then his fist clenched. "I know what Lovering's up to! He's got that map of my father's which showed the location of father's treasure on Rhea, the Saturnian satellite. Lovering is dickering to get the help of Derdemos and his band to lift that treasure!"

Sin Grih, the little Mercurian, asked skeptically, "Why wouldn't Lovering simply go out to Rhea and lift the treasure himself?"

Arkol answered that. "Rhea's dangerous! No one knows much about that world except that few people have ever visited it and escaped. Lovering wouldn't dare try visiting it alone, but would figure that Derdemos' pirates as allies would make it safe. He'd promise 'em a split."

"That's just what he's up to!" Rand flared. He felt intense, fierce anger. "He's murderer, liar—and now thief!"

"I don't believe it!" Moira declared hotly. "Because you're a pirate and pirate's son yourself, you think everyone else a criminal. Carl is out here looking for me—and I hope he finds me!"

Rand looked at her, with baffled emotion. Then the fierce anger he felt detonated a scheme of action in his brain. He swung around and spoke loudly to the gathered pirate horde.

"Men, you all know that your former leader, Horruf, was planning an attack on Derdemos!" Rand told them. "You know that Derdemos has been your deadly enemy, that he's robbed you of much loot and that his black cruelties and massacres have enraged the whole System against the very name of pirate.

"Do you want to follow me against Derdemos?" Rand continued. "If we can take him by surprise, we can blast him and his band of vicious murderers out of existence. And all the loot that Derdemos has piled up on Thrann will be yours to share among you!"

A yell of wild approval greeted him. Rand's voice rang through the pale sunlight. "Then make every ship ready at once, see that every atom-gun has full magazines, that each man's space-suit is in order. In eight System-hours we'll blast off for Thrann!"

SHOUTING, the pirates excitedly dispersed toward their ships. Almost at once, began a hurrying bustle of feverish preparations.

Grugo, the fat Uranian gunner, had a gleam in his eyes. "Ah, it's John Ran-

dall's true son you are!" he told Rand. "Leading us out to battle and rich loot already!"

"Sure, it's fine," Nald Arkol said puzzledly. "But what do you get out of it, boy, if Derdemos' loot all goes to the men?"

"Carl Lovering's at Derdemos' base," rapped Rand. "I want Lovering, that's all! When I get him, I'll make him clear me!"

"You're keeping up your pretense well, aren't you?" Moira said contemptuously to him. "You know you're only leading this piratical foray to get a chance to murder Carl, whom you've always hated."

"Moira, won't you listen?" Rand pleaded, but she turned away, her small figure uncompromising in every line as she left them.

"Had I better lock up the little wildcat?" Arkol asked Rand.

"No—I can't blame her for not believing me," Rand said gloomily. "Give order that she's to be respected absolutely."

Night swept down on the pirate village under the giant flowers, a few hours later. Through the towering stalks and enormous lilies far overhead, there peered down vast Jupiter and its brilliant, thronging moons. Rand looked with feverish intentness at the little disk of Thrann.

The pirate settlement was a beehive of excited activity as the last preparations were carried out. Lights flared that gleamed off the sides of the forty pirate ships drawn up on the landing-field.

Arkol came hurrying up to Rand. "All ready to go!" he cried. "We're using that Patrol ship we captured for your flagship, aren't we?"

Rand nodded. "Before I go, I want to see that Moira has a guard to make sure she's safe while we're gone."

But Rand soon discovered that Moira was not in the settlement. And sharp alarm he felt made him question the gathering pirates.

"Your girl?" asked one of the pirates, a young Martian. "Why, she took off in a little two-man cruiser, an hour or so ago. You'd said she was your woman, so we supposed it was all right."

Arkol swore. "The little fool—trying to escape to Earth!"

"No!" Rand said tensely. "I believe she would make for Thrann to warn Lovering of our attack, and spoil our surprise. She's convinced Lovering is innocent, remember."

Arkol and Grugo looked grave. "That may make things hard for us, if it's so. For if Derdemos gets word we're coming, he'll dispose his superior forces to meet us, and—"

"No use standing here and talking about it!" Rand cried. "We start at once—maybe we can reach Thrann before Moira can get there!"

He raised his voice to the pirate throng waiting in the flaring lights around their ships. They sprang to their craft.

Rand hastened toward his own captured Patrol ship, Arkol and Grugo and Sin Grih hastily following. Its crew—the loyal convict crowd that Rand had helped escape from the Moon—was in it.

"Doors shut!" Rand snapped as he strode to the bridge. "We blast off in two minutes! Grugo, see that our batteries are ready!"

Cyclotrons started throbbing as he and Arkol reached the bridge. There Rand rapped his fleet-orders into the telaudio.

"We take off in a staggered triangle, with this flagship as apex," he ordered. "On space-suits, everyone, before we start."

He and Arkol donned their own suits —the preliminary to battle action. The Martian took the instruments, and Rand the controls.

"Blast off!" he shouted into the telaudio, pressing the levers.

Smoothly, with rockets roaring, their ship slanted steeply up through the giant lilies into the full white glow of great Jupiter. And with drumming drone of countless tubes, the pirate fleet was rising behind them. In the staggered triangle, they shot into space from Kerek.

Rand laid a course straight toward the little disk of Thrann, just visible half around the great bulk of Jupiter. The course would take them close past the pinkish, big sphere of the large moon Callisto.

Arkol was calling from the instruments, in a taut voice. "Veer a shade sunward and upward. Hold her, steady. That's the course."

Rand felt savage determination crystallizing in him. He *would* find Lovering if he was at Thrann—he *would* make Lovering confess—

They were swinging past the barren pink sphere of Callisto, which was above and to their left, when the unexpected happened.

"Spin right, boy!" yelled Arkol wildly. "An ambush—that girl *did* get to Thrann and warn Derdemos—"

From above and behind Callisto, two columns of sixty fast ships were diving on Rand's fleet, with all atom-guns going!

CHAPTER VI

World of Enigma

"THEY'RE 'boxing' us!" yelled Nald Arkol.

Rand understood the phrase. "Boxing" was a favorite maneuver of an attacking space-fleet—it meant dividing into two columns and running past the front and rear of the enemy force, using all its guns in passing and buckling up the enemy and smashing his formation.

"Spin right and heel over out of the 'box!'" Rand yelled into the telaudio, his hands darting to the firing-levers.

"They got some of us!" groaned the grizzled Martian.

The atom-guns of the two passing columns of Derdemos' fleet were already raking front and rear of Rand's squadron.

Flaring puffs of light told of atom-shells hitting ships behind Rand's flagship, and others back up at the rear of the formation.

Then their flagship spun dizzily and heeled over into space, as its rocket-tubes blasted deafeningly, keel and stern and left lateral tubes spouting atomic flame simultaneously.

Rand peered tautly back upward as his craft swooped dizzily down to the right. The ships of his formation, now reduced by a half-dozen, were following him closely, out of the jaws of Derdemos' "box."

Even as they dived clear, Rand glimpsed Derdemos' two columns rushing to join together and come down on their stern. And such a superior force striking their stern, weakest spot always in space-fighting, would cripple half or more of his ships in a few seconds.

"Loop up and rake them from beneath!" Rand yelled into the telaudio. "Side-spin when we're under them!"

Like one ship, Rand's thirty-odd craft changed their dizzy dive into a lightning upward loop, curving right back up toward Derdemos' two joining columns, and running past underneath them.

And as Rand's elongated triangle of ships roared beneath the length of the

enemy columns, each of his ships had gone into a side-spin, using lateral tubes to make a quarter-turn so that it was the broadside of Rand's ships that was facing Derdemos' formation overhead.

"Let go every gun on our port side!" Rand shouted fiercely, at the fleeting moment of contact. "Give it to them, Grugo!"

"We got 'em now, the devils!" exulted Nald Arkol wildly.

The ship was shaking to the high-speed discharge of its heavy port atom-guns, a hail of small missiles raining up toward the enemy ships above as they flashed along underneath them.

Rand glimpsed one after another of Derdemos' ships smothered by blinding flares as atomic shells got home. And from all his own pirate followers, every port gun was raining death on the fleet above.

Derdemos' ships staggered and turned desperately upward from that lightning assault which had been made so unexpectedly by an apparently fleeing enemy. But the staggered enemy was slow turning—

"Cross their head!" Rand shouted. "Break up their formation!"

He sent his own flagship plunging in the van, shuddering to the thrust of flaming rockets as he steered it across the head of Derdemos' straggling column.

The whole of Rand's squadron flashed past the head of Derdemos' line in split-seconds. That meant the terrific fire of each ship in turn concentrated upon Derdemos' squadron-leaders. The forces from Thrann were buckled up, their formation breaking as more than a dozen of their leading ships were reduced to drifting wrecks.

"They're breaking formation!" cried Arkol gleefully. "Now's our chance!"

"Spin over and smash down into them!' Rand ordered fiercely. "It'll finish them!"

His squadron, still holding to the elongated staggered triangle formation, swooped around to follow him and dived sharply back down on the disorganized mass of the Thrann pirate's ships.

Out of formation, fighting back singly or in small groups, Derdemos' ships couldn't stand the heavy, concentrated fire of Rand's diving force. Already of sixty ships originally in Derdemos' fleet, two dozen had been wrecked, or badly crippled. Now the milling survivors frantically broke in all directions.

"They're b e a t e n ! ' ' Arkol cried. "Shall we try to run them down?"

"No, we mustn't disperse our forces," Rand answered. "Head straight for Thrann."

GRUGO and Sin Grih burst up into the bridge, slapping his back, pumping his hand, in their exultation.

"That was the quickest-thinking maneuver I've seen since your father was in space—that sudden up-loop and side-spin when they thought they had us!" Grugo cried. "They weren't dreaming of anything like that, and it caught them unawares."

Rand said shakily, "I didn't think of it—I knew about the maneuver, and somehow when they were going to blast us, I yelled the order for it. I swear I was as surprised as any of you!"

"Aye, it's the brain and nerves you inherited from John Randall that made you able to call that remembered knowledge into play so swiftly," Arkol said proudly. "You're going to be known as as great a space-fighter as he was, boy."

A voice came sharply from the tel-audio. "Chief, we've spotted the crippled ship of Derdemos himself. It's off to port."

"Good, we'll capture him!" Rand exclaimed.

"Why not just blast the devil out of

space?" Grugo demanded.

"No—don't fire a shell at him—Lovering may be in that ship, and maybe Moira too!" Rand exclaimed. "We'll board them."

Derdemos' ship, which had been badly hit when Rand had crumpled up the head of the enemy formation, floated in space a metal wreck whose sides were riddled by flares of many atom-shells.

Rand's squadron halted, and Rand and Arkol led the boarding-party across, leaping in their space-suits to the wreck, atom-pistols ready in their hands. They found a score of space-suited men aboard, but Derdemos and his men made no resistance to them.

Derdemos, a pale-skinned, filmy-eyed Venusian of past middle age, eyed them fatalistically through his glassite helmet.

"Where is Lovering?" Rand demanded eagerly. "And where's the girl who came and warned him and you of my coming attack?"

Derdemos eyed him sourly. "You want to know that? Well, you won't find out from me—why should I help you in any way when you're going to lock us all out?"

"Tell me that, and I'll see you and your men aren't locked out," Rand promised. "I don't believe in butchery, anyway."

Derdemos seemed doubtful. "They say John Randall always kept his word, so maybe you will too," he muttered. "I'll tell you. That girl came to warn Lovering—the little fool thought Lovering had come out here to rescue her!"

"What happened to Moira?" Rand asked tensely.

Derdemos laughed. "Lovering disillusioned her pretty quickly—told her flatly he was only after John Randall's fabled treasure, but that he would have to take *her* too, now that she knew he was the man who'd stolen the treasure-map back on Earth."

"He admitted that?" Rand cried. His heart bounded. Now Moira *knew* that he was innocent of that murder, that Lovering was guilty.

"You see," Derdemos was continuing, "Lovering had come to me to get me to help him with a small, strong force to lift the treasure from Rhea. I'd agreed, for a share, and had chosen a force of three ships—no more of my men than that would go to Rhea, for you know the black stories they tell about that cursed mysterious Saturnian moon.

"So," the Venusian pirate concluded, "when we learned from that fool girl you were coming with Horruf's pirates to attack Thrann, Lovering suggested that he go on at once to Rhea for the treasure, while I cleaned up your force. He said I could whip you easily, damn him!"

"So Lovering's gone with three ships to Rhea?" Rand cried. "What about Moira?"

"Oh, he took the girl along with him, of course," Derdemos said carelessly.

AN oath ripped from Rand's lips. His face was so hard and dangerous and dark that even Derdemos recoiled a little from him.

Rand spoke through set teeth. "I'm going on to Rhea, Arkol. Not only for Moira—but because Lovering's my only chance to clear myself of that charge."

Arkol said doubtfully, "Grugo and Sin Grih and all the rest of us on this ship will follow you to Rhea or hell itself, boy! But I don't know about the rest of our pirates—Rhea's got a bad reputation all over the System, remember, and they may hang back."

"We won't need them," Rand said decisively. "Lovering only has three ships—we can beat those odds. We'll go in

our ship, alone."

He hesitated, then said, "But I've got to point out that this is my own private expedition. We may be able to find my father's treasure if it's still there, yet we may find nothing but death—"

"Hell, you got us off the Moon, didn't you?" Grugo said. "We owe you our lives and liberty both!"

"Yes, we're going with you!" Sin Grih declared determinedly.

"I want you to stay and take charge of the band, Sin Grih," Rand told the fiery little Mercurian. "Hold Derdemos and these others captive and go on to Thrann with our forces—you can divide Derdemos' stolen plunder there among our men, and wait for us."

The little Mercurian unwillingly agreed. Rand returned with Arkol and Grugo to his flagship, and then told his ex-convict crew of what he proposed to do.

"If any man here doesn't want to risk going to Rhea, he can drop out and I won't blame him," Rand finished. "Nobody knows what is on that world, but we do know it's something plenty dangerous."

Not a man would desert him. "We stick with you, chief!"

"Good! We start at once!" Rand exclaimed. "Grugo, you can replace Sin Grih as chief cyclotron-man?"

Presently the craft was rocketing at full acceleration, heading away from Jupiter and its thronging moons toward the far yellow speck of Saturn, many millions of miles outward in space.

The cyclotrons throbbed, the stern rockets blasted monotonously as they built up terrific speed. Yet their velocity seemed slow to Rand, peering from the bridge with Nald Arkol.

"Lovering has a start, and he'd take the fastest ships Derdemos could supply," Rand muttered. "He's shown his hand fully, now—taking Moira with him by force, after my father's treasure."

He swore. "I wish to God my father had never hidden that treasure! It's only brought me ill fortune!"

Arkol said thoughtfully, "It's queer, John Randall piling up a hoard like that on faraway Rhea. John Randall never seemed to care anything about money or loot, as such—the thing that always interested him most was championing oppressed planetary people against Earthmen exploiters. It was that cause that made him a pirate, I've heard."

"How could he go and come to Rhea, anyway, when nobody else dares land there?" Rand wondered.

"He must have had some way of overcoming Rhea's mysterious perils," Arkol declared. "Wasn't there any information about that on that map he left, or his other papers?"

"I don't think so—I only saw the map once, and remember only that it showed two mountain ranges on Rhea's western side, meeting at a thirty-degree angle and with a red circle at their apex," Rand answered dubiously. "And there was nothing else beside the map but old letters and this little ray-light."

He showed Arkol the little copper tube, the souvenir of his father hanging around his neck.

Arkol examined it curiously, pressing its stud and releasing a tiny beam of rather dim, bluish light.

"Doesn't even seem a good raylight," said the Martian, "though I suppose it's precious to you because it was your father's. Well, boy, looks like we'll have to take our chances at Rhea unless we can manage to overtake Lovering's ships before he reaches Rhea—which I doubt."

ARKOL'S doubt proved well founded in the following days. For nine

days, pushing the ship to the limit of its speed, Rand rocketed on with his loyal company toward Saturn. And in all that time, as the ringed planet slowly grew larger, they did not sight Lovering ahead.

They swung in a broad curve, close around the colossal ringed bulk of yellow Saturn, wild, lawless planet of the interplanetary frontier. Threading through the ten gleaming moons of the mighty world, they rushed on toward the dark, somber globe that was the moon Rhea.

"Damned moon *looks* forbidding," muttered Grugo, the Uranian, as he watched with Rand and Arkol from the bridge. "No wonder people leave it alone."

"Lovering and his men, and Moira, must have landed on it hours ago," Rand said feverishly, manipulating the rockets to swing low over the nighted western hemisphere of the mysterious moon.

Black, somber and forbidding lay the dark surface of Rhea beneath the solemn stars. Into its thin atmosphere reared jagged, fang-like peaks of low mountain-chains, rising from rocky plains.

"Air—but no sign of life, or danger," muttered Arkol.

"Look—there's two mountain-chains that converge!" Rand cried.

He had glimpsed the two low, jagged ranges that ran together at a thirty degree angle. And there gleamed three starlit, long objects.

"Lovering's ships!" Rand exulted. "We're landing beside them! Tell the men to be ready for a fight!"

He brought their cruiser down with a rush beside the three parked ships. A minute later, Rand and Arkol and Grugo led their armed crew in a run across the dark plain toward the silent ships.

Rand's heart pounded with hope, his atom-pistol cradled in his fist, the thin, cold air rasping his nostrils as he ran.

To their amazement, there was no sound of alarm from the three ships. And they found those ships absolutely empty of humans.

"Something damned wrong here," Arkol whispered. "Lovering wouldn't be fool enough to leave his ships unguarded. What's happened?"

"We'll have to search for them!" Rand cried. "Come on, men!"

They emerged from the ships, and were starting northward between the converging mountain-ranges, when Grugo uttered a sharp cry.

"Look! What in hell's name are *those* things?"

A half-dozen strange creatures were gliding swiftly toward them across the somber, dark Rhean plain. They looked like small clouds of coiling black vapor, moving with deliberate, intelligent intention.

"They're gaseous—but they must be *living!*" Arkol said awedly. "Creatures of Rhea—queer Rheans nobody ever saw the like of before!" *

"I think they're dangerous, that they mean to attack!" Rand exclaimed. "Look what they're doing! Fire at them!"

The gaseous black Rheans were darting straight toward them.

CHAPTER VII

Power of the Rheans

EXPLODING atom-shells had absolutely no effect on the gliding black gaseous creatures. The strange Rheans

* All over the universe life forms spring from carbon sources. Why could not gaseous beings spring from carbonic gases? Carbon, everywhere, means life. Perhaps on Rhea, tissue formations, so attenuated as to *appear* almost gaseous, can be possible because of rapid metabolism.—Ed.

rushed on toward Rand's party, and then an incredible and horrible thing happened.

Each of the six gaseous creatures seemed to seize on and wrap itself around one of Rand's men. Swiftly, the black vapor of each creature sucked itself through mouth and nose *into* the body of the man it held, and disappeared.

The six seized men, at first frantically trying to escape the gaseous creatures, suddenly underwent terrifying metamorphosis as the Rheans entered their bodies. The men's faces became stiff, hollow-eyed, mask-like unhuman. They charged fiercely upon their comrades!

"Grab them—tie them up!" Rand yelled horrifiedly. "Those gaseous creatures .have somehow *possessed* them!"

There was a frantic, scuffling struggle as he and his men sought to subdue their own possessed comrades. They finally succeeded in overcoming the six men, and binding them tightly.

"Gods of Mars, what are those things?" gasped Arkol wildly. "They're like black devils—"

"I think they're gaseous creatures," Rand declared breathlessly. "They apparently can enter another living creature's body, seize control of his brain, and thus bring that victim absolutely under control."

"Then that's what has happened to all the unlucky explorers who have tried to visit Rhea!" Grugo exclaimed. "You saw that atom-guns have no effect on them—there'd be no defense against them."

Rand paled. "Good God! That's why Lovering's ships are deserted! The Rheans seized Lovering and his men, and Moira!"

"Chief, look here!" yelled one of his pirate followers frantically. "The things are coming *out* of the men now!"

Rand turned startledly. The possessed six men had ceased to struggle against their bonds, and out of the mouth and nose of each was coming the coiling black vapor of the Rhean that had seized him. In a moment, the six Rheans were free, the men were normal again. And the six black gaseous creatures were advancing on others of the men.

"We can't keep 'em captive—as soon as we tie up men they seize, they leave the men and seek others!" Arkol cried.

"Blast them with all your pistols!" Rand cried, leading his men back in a retreat from the ominously advancing things.

Every atom-gun in the company flicked shells, that exploded in a blinding flare of atomic energy which absolutely enveloped the Rheans. But they came on through it, unharmed.

"Their bodies must be of *photons*, instead of atoms!" Grugo groaned. "No ordinary atomic energy can harm them. Nothing but some kind of beam that would affect non-material photons would do it—"

The words detonated remembrance in Rand's seething brain. Mention of a force-beam as a possible weapon had recalled to him the odd little raylight his father had left with the map of Rhea.

Feverishly, Rand snatched it from his neck. He levelled the copper tube at the nearest of the advancing Rheans, and pressed the stud. The needle-like blue beam shot forth and struck the Rhean.

The black gaseous creature's vapor-coils spun madly as the blue ray hit it—and then began to disintegrate and drift away in fading patches of drifting blackness. The thing had been destroyed.

"You done it, boy!" cried Arkol in

wild excitement. "Give it to the others!"

Rand was already swinging the blue beam onto the other five Rheans. Two of them were destroyed before the other three gaseous creatures took alarm and glided away in flight.

Rand wiped sweat from his forehead as he switched off the tiny blue ray. "Just in time, I remembered!" he panted.

"What the devil's in that raylight, anyway?" cried Grugo.

"It's not a raylight—it's a little projector of some form of photon-destroying force," Rand declared. "It enabled my father to visit Rhea safely, and he left it with his treasure-map, for that reason."

He looked a little wildly around the somber, starlit plain of this terror-tenanted moon.

"We've got to find Lovering and Moira quickly—there's no telling how long this weapon will work," he said urgently. "I saw traces of digging northward and was starting that way when the Rheans attacked us. Come on!"

THEY followed him in a quick trot northward. A half-mile from the ships, they found a mound of upturned, dark rocky soil where digging had been recently carried on. Tools lay unused now nearby.

A group of four Rheans advanced suddenly on them as they hurried to the excavation. Rand hastily brought the tiny blue beam into play, and had to destroy all four of the monstrous gaseous things.

"The beam's already perceptibly weaker," he muttered tautly. "The projector in this little tube can't have a very high charge."

They reached the edge of the excavation. It was evident that Lovering's party had been doing this digging.

"Look there, boy!" Arkol yelled. "Your father's treasure!"

Down in the excavation was the uncovered top of a vault of massive gray "inert" metal. There was a curious, keyless lock on it.

"Lovering and his bunch uncovered it and were trying to open it when the Rheans possessed them!" Grugo guessed. "But where's the key?"

Rand had an idea. He stooped and shot the thin blue beam of his weapon into the pinhole aperture of the lock. And the lock's mechanism clicked, the metal lid of the vault swung silently upward.

Starlight flashed brilliantly off the contents of the vault—stacked masses of super-valuable rare metals, titanium, tantalum and others; open boxes of rare planetary jewels, Neptunian pearls, Jovian rubies, Earth diamonds. A hush gripped them all.

"John Randall's treasure!" breathed Nald Arkol. "Why—why did your father work so hard to amass it on this lonely moon?"

"Chief, some of Lovering's men are coming!" a pirate yelled.

Rand swung sharply around. Four men were approaching, brutal-faced pirates whose faces now were stiff, white, hollow-eyed.

"They're possessed by Rheans!" Rand warned quickly. "Grab 'em!"

They overwhelmed the four possessed men. Instantly, the gaseous Rheans left their bodies and sought to seize some of Rand's men. Flashes of the blue photon-destroying ray dissipated the vapor-things.

"God!" choked one of the now normal men of Lovering. "Those things came in our bodies as we dug here—ruled our brains and bodies—"

"Where's Lovering, and Moira Laird?" Rand demanded fiercely.

The man pointed shakily north.

"That way, I think—"

"Grugo, you and the men stay here and take the treasure aboard the ship—then ascend out of danger and wait for my signal," Rand told the Uranian. "I've got to be going after Lovering and Moira."

"But chief, we'll go with you—" protested the Uranian.

"This weapon can't protect us all!" Rand snapped. "It may be exhausted any time. Do as I say! Arkol, you'll pilot the ship."

"Like hell I will—I'm going with you!" the Martian declared.

Rand could not dissuade him. There was no time to lose. Leaving Grugo and the pirate band, Rand and Arkol swung northward over the plain.

Twice in the next quarter hour, they saw advancing Rheans. Each time, the blue beam repelled them—but each time seemed weaker!

Rand peered desperately across the starlit, somber plain. The white stars seemed eyes mocking his hope. In the distance behind them, he heard the ship under Grugo's command rise from the dark moon.

Then he glimpsed a glimmering white figure. His heart bounded. Moira had worn a white zipper-suit when he had last seen her—

"It *is* Moira!" he cried in wild elation. "And Lovering too! Come on, Arkol!"

HE bounded forward, the Martian following hastily. The figures of slim Moira Laird and big, broad-shouldered Carl Lovering were unmistakable in the starlight, ahead of them.

Moira and Lovering turned to face them. And Rand felt a freezing horror invade his veins.

"God!" muttered Arkol. "The Rheans have got them, all right."

Moira's white face was a stiff, lifeless mask in the starlight, still beautiful but *unhumanly*, differently beautiful. And Lovering's dark sardonic countenance was equally mask-like and hollow of eye.

They charged forward at Rand and Arkol! Driven by the Rheans who now dominated their bodies, they sought to kill or capture! Arkol went down under the possessed Lovering's rush. And Rand found himself fighting Moira!

Moira—yet not Moira. The girl was an unhuman wildcat, seeking to claw him down, her hollow eyes flaming with dreadful, alien intelligence. And Rand, frantically trying to fend her off, couldn't bring himself to harm her.

He heard Arkol's choking cry. The Martian was being overcome. That decided Rand. He balled his fist, hit Moira hard on the jaw.

She went down, physically unconscious. Rand sped to where the possessed Lovering was choking Arkol. He hammered Lovering's head, stunned him with the beam-tube, and then rapidly tied the man up.

"Thanks, boy!" panted the Martian. "He nearly had me—"

He stopped short. The Rhean that had possessed Lovering was swiftly emerging from the man's body, in a coiling black cloud.

Rand hastily turned on the blue beam. But only a thin, feeble ghost of a ray came forth from the exhausted instrument. It dissipated the Rhean's photon-body, finally, but only after moments.

"Look at the girl!" Arkol cried.

Rand spun around. The Rhean that had possessed Moira was also leaving the body of the unconscious girl.

With a prayer in his heart, Rand trained his instrument on the creature. But only a thin, last flicker of blue force came from the tube. It struck the

Rhean, and the creature recoiled—but then the weapon went finally dead.

"Gods of Mars, your weapon's dead and that Rhean is still undestroyed!" groaned Arkol.

Rand felt black despair. The Rhean seemed poised doubtfully; it black gaseous body roiling wildly.

Then, as though alarmed by the weak shock from Rand's dying weapon, the Rhean glided rapidly away in flight.

"Thank God!" Rand breathed. "If the thing had attacked us, we'd have been helpless."

"We'll still be helpless if we meet any more of 'em!" Arkol said.

Rand paid no heed. He was bending eagerly over Moira, chafing her wrists and white cheeks. Gradually, she came back to consciousness.

"Eric!" she cried, looking up at him with horror-filled eyes. Her arms went around his neck, she clung to him, sobbing wildly. "Eric, that horrible creature was dominating me, ruling me!"

Soon she quieted a little. She told him tearfully, "I know now you told me the truth, that you were innocent, Eric. Can you forgive me?"

He held her closely, for answer. Arkol's voice interrupted.

"Boy, let's get out of here before more Rheans find us!"

Rand hastily straightened, drew his atom-pistol and fired six shells far up into the starry sky, in the pirate signal. The six bursting flares brought their ship rocketing down swiftly toward them.

LOVERING was still unconscious as they hauled him aboard. Grugo met Rand in the airlock passage, as the ship shot hastily upward.

"We got your father's treasure for you, chief!" the Uranian exclaimed. "And in it was a letter written by John Randall—to you."

"A letter of my father, to me?" Rand repeated, incredulously.

Grugo led to the cabin in which the mass of gems and rare metals was stored in careless heaps worth many millions. The Uranian took from a copper box a time-yellowed sheet which he handed to Rand.

Rand read it aloud, his voice strangely moved:

"I, John Randall, amassed this treasure for a purpose. That purpose is the relief of the injustice and oppression practised upon the poor, semi-intelligent planetary peoples by exploiting Earthmen. Resentment against that oppression was what led me to break the law and thus drift into piracy. I have done what I could to end such injustice, and hope this treasure I've gathered will go far to do that.

"For I hope that this gathered wealth —all of which was taken from the exploiters and oppressors—will someday be used to establish a foundation for the education of the semi-intelligent planetary races. Only education will relieve their condition, in the end. It is my hope that my child, when he is born and grows to maturity, will use the map and weapon I am leaving to my wife, and secure this wealth and use it for that purpose. If it is my son to be who reads these words, I say—I know you will do this, and that the name of John Randall, space-pirate of old, will not be entirely condemned in times to come."

Rand looked at the others. "It's what I want to do with this treasure," he said, movedly. "What my father wanted and worked for."

"Of course, boy!" Arkol cried. "The treasure's yours to do what you want with. We men have Derdemos' loot to split among us!"

"But Eric, you can't do that, you can't go back to Earth with that murder

charge against you!" Moira cried. "And Carl won't confess."

"I think Lovering will confess, right now," Rand said grimly. "Have him brought up to the bridge, Arkol."

Lovering's dark face, still a little dazed, regained its mocking self-confidence as he faced them all in the bridge of the ship.

"So you beat me to your father's treasure, Eric?" he said coolly. "Well, it won't do an outlawed, escaped criminal much good."

"I'm not going to be an outlaw long," Rand said harshly. He turned to Arkol. "Turn on the telaudio transmitter to full directional range, and tune its wave to the official wave of the Planetary Patrol."

Arkol did so, puzzledly. Rand turned back to Carl Lovering.

"Now, Lovering," he said grimly, "you're going to talk into that telaudio and be heard by every Patrol post in the System. You're going to make a full confession that you murdered my uncle on Earth."

Lovering laughed. "You can't make me do that, Eric, and you know it. If you're planning to threaten torturing me, it won't work."

"There'll be no torture," Rand said calmly. "If you won't talk, I'll not harm you. I'll just leave you down here—on Rhea!"

He pointed down as he spoke, to the dark, somber moon-plain below, over which black Rheans were gliding like evil wraiths.

Lovering paled. He had had experience of the dreadful death-in-life of one possessed by a Rhean, and remembrance shook him.

"I suppose," he muttered after a time, "that even a life-sentence on the Moon is better than that hell down there. All right, I'll make your damned confession."

Rand spoke into the telaudio. "All Patrol officers listen!"

FIVE minutes later, Lovering had finished the confession which gave details as to his murder of Philip Blaine—a confession which was flashed as he spoke to the far reaches of the whole System.

"That'll do it," Rand said, switching off the transmitter. "After all the details you've given, and with Moira to testify to what you admitted to her, you'll never repudiate that confession."

He turned with a haggard smile to Arkol. "That finishes our business at Rhea, Arkol. Set a course back for Kerek."

By the time, ten days later, when their ship was curving in past mighty Jupiter to the pirate Moon of Flowers, a message had come over the telaudio from Captain Thomas Laird, far back on Earth.

"Eric, I've seen the government officials, and they say Lovering's confession clears you of the murder-charge," old Laird told him. "And while you're still under charge of helping convicts escape from the Moon, they say that escape is extenuated by your innocence of the crime for which you were sentenced, and that you'll get a pardon for the prison-break."

Rand answered hesitantly. "Thanks, captain. I'm—I'm glad."

"And what's more," old Laird continued from far away, "it seems from this message of yours about John Randall's treasure and its use that your father was not the man I thought him. I believe I'd be proud to welcome Randall's son now as a guest—or a son-in-law!"

Rand put his arm tightly around Moira. "We're going back to Earth, Moira—the last obstacle is removed."

But he found he was wrong. For when, two days later, he and Moira prepared to leave Kerek in the Patrol cruiser they had originally captured at the Moon, Rand was faced by Grugo and Arkol and Sin Grih and all the throng of the assembled pirates.

"You *can't* leave, chief!" Grugo protested. "You're the best leader we've ever had—with you at our head, we'll make space-history!"

"Just think of the fat swindling merchants and planters and captains of ships, bulging with loot for us to take!" Sin Grih tempted.

Rand shook his head, smiling. "I'm going back to Earth, and be a peaceful, lawful space-sailor myself in the orderly inner planets."

Nald Arkol had not yet spoken. But the grizzled Martian shook his head now as he crushed Rand's hand.

"You'll get tired of it, boy!" he predicted. "You'll weary of the tame runs back and forth between those puny little inner worlds, and you'll get to thinking of the big, wild outer spaces and the fun of hell-for-leather chase and space-fight out in the lawless moons, and the thrill of coming home to old Kerek with plunder and celebrating. You'll think of all that, boy, and your blood will pull you back to us."

Rand merely shook his head, as he clapped the grizzled pirate fondly on the shoulder.

But when their cruiser rose from Kerek and headed into space, manned again by the Patrol men from whom they had captured it, and with Carl Lovering a cursing prisoner in one cabin and the treasure in another, Moira turned from looking at the receding Moon of Flowers to look at Rand.

"You *won't* ever do what Arkol said, get lonesome for that wild pirate life again, will you, Eric?" she asked earnestly.

He smiled, drew her closer. "Not a chance, Moira. You and I are going to be so happy together, all that will be forgotten."

But, as he looked past her dark head at the dwindling pirate moon, Rand's lips moved in a wordless whisper.

"I wonder—"

THE INVISIBLE WHEEL OF DEATH

(Continued from page 69)

outburst of cheer.) It is with extreme pleasure that I choose my method of dealing with these six guests from the White Comet Union. Let me first review their crimes, as proved to the satisfaction of the Carnage Ring. These four—"

She pointed to the four prisoners who sat to the right of Theban.

"These four were White Comet officers who sought my friendship and begged my confidences so that they could gain valuable information to be used in their war against the Draz-Kangs. Fortunately I was able to bring them on a sight-seeing tour to the dead crater, where they have since remained to enjoy our scenery."

These words brought a wave of laughter and applause.

"This man," she pointed to Theban, "has been responsible for driving us and our fellow Draz-Kangs out of our strongholds, one after another. When I have dealt with this man, we will be through with one of our most dangerous enemies. And this man—"

She pointed to Ilando.

"This man is one of the most dangerous persons I have ever encountered. He pretended to be a convert to our cause; but upon the first occasion that he was put to a test, he resorted to deceit and trickery to betray us.

"And now for my plan of punish-

ment—"

The multitude waited breathlessly, expectantly.

"I have decided to mete out to all six the same treatment."

An impressive silence. The eyes of the audience glowed with bloodthirsty eagerness.

"I have decided to give all six a chance to live—"

A low sullen groan of disappointed Draz-Kangs rolled throughout the underground world.

"—a chance to live—a chance to escape—*by climbing over the crater wall!*"

A WILD joyous uproar rocked the caverns as the crowds leaped to their feet, shouting, laughing like demons, letting themselves go in a torrent of fiendish jubilation.

It was a three-mile trek across the yellow swamp to the point where such crater-climbings were held. Most of the Draz-Kangs wore wide flat swamp shoes. The Carnage Ring and some of the dignitaries, including Vida, were conveyed in swamp sleds. The guards marched, and before them marched the six prisoners.

"She's got some plan," Ilando kept whispering to Theban all along the way. "She and I are going to run out on this party somehow. We've pledged to each other—you don't believe me, Theban. Just wait, you'll see!"

Theban kept consulting his watch. Now and then he turned his head for a quick backward glance. The mountains gave him his bearings. He knew he was being taken to a point diametrically opposite the spot where he had made his tests.

The point, when it was reached, proved to be a sharply inclined gash that cut back through the vertical two-hundred-foot wall. From all outward appearances it could easily be ascended.

The crowd divided into two long lines that crowded thickly toward the crater walls and heaped upward on the lower rocks that bordered the lower end of the ascent. As the moment for action drew near, the multitude set up an excited rhythmic clamor that was to continue throughout the executions.

The six prisoners, closely inclosed by guards, took their positions in a row twenty-five or thirty yards from the foot of the incline.

Vida stood near them. She was to have the honor of giving the orders. Back of her were the fifteen members of the Carnage Ring, stationed on a slight angle so that they could witness the races to advantage.

"Number one, step forth," Vida ordered. A prisoner stepped forth. The guards aimed their flame guns, pulled the triggers. The flames hissed against the ground in a semicircle back of his feet.

"Go!" Vida called.

The prisoner raced up the mountainside.

Theban stole a glance at his watch. His heart leaped. By a stroke of luck —according to Theban's calculations— the first prisoner would cut through the invisible gate if he didn't slack his speed—

Prisoner number one fell lifeless, rolled down a few paces, came to rest against a jutting rock.

"Number two!" Vida called out against the wild blood-thirsty uproar. "Go!"

NUMBER two ran like a deer. Fifty or sixty feet upward he tried to angle off on an odd course, but white ropes of flame shot past him on either side, like railings, to hold him to the path.

(Continued on page 116)

The ARMAGEDDON of

by ARTHUR T. HARRIS

"You will scowl more furiously, Imperator, when I say I am impregnable here!"

JOHANN SCHMIDT

It was an empty honor the Imperator conferred on Professor Schmidt—or at least he thought it was

IT was as though, suddenly, the crushing impact of history-in-the-making had come to a dramatic pause.

Bred in a tradition which called for ruthless action—action at any price, the vast naval armada of the Middle European Confederation seemed to strain at its leash.

But the supreme command of this all-powerful flotilla had been conferred by the Imperator himself on Professor Johann Schmidt.

It was a ridiculous situation, of course. Schmidt was a scientist, an inventor in this year 1963. But his had been the brains behind the marvelous U-235 atomic motors which powered the great fleet. And Schmidt, for his whole-souled labor of twenty years, had asked only that he go along with the armada "to see that my work is carried out."

"Nonsense!" the Imperator had exclaimed. "You, Professor Schmidt, are the greatest scientist alive! The Fatherland is proud of you. I, the Imperator, command that you be given the supreme authority in our invasion of the American hemisphere!

"That is to say," the Imperator amended shrewdly, "the actual technical details of the invasion will be carried out by your subordinates. But the great victory will go down in your name alone. That, Professor Schmidt, is my reward to you!"

"My Imperator," said the old scientist, saluting as rigidly as he could, "you

have fulfilled my fondest dream. Rest assured that it will be carried out with the utmost efficiency."

The Imperial Navy had learned of those brave words. In mile upon mile of incredibly armored battleships, aircraft carriers, submarines and destroyers, it was making full speed across the moon-gilded Baltic Sea, heading for the Skaggerak and its outlet into the North Sea, and then to the broad Atlantic.

But sharply at midnight, visiscreens on all the vast armada had clicked into life, and the tired, gray-haired Professor Schmidt had materialized in all his quiet authority.

"Gentlemen," Schmidt had ordered the officers on night duty in the control turrets, "I have a message which I consider of great importance. I desire to deliver it myself to the entire personnel of the fleet. You will be so good as to call all men to their battle stations, so that I may address them through the loudspeaker system. Meanwhile, continue on the course, as plotted."

That had been five minutes ago. With matchless discipline, the thousands of sailors conscripted for the Imperial Navy had taken their stations as one man. Eyes held rigidly at attention, the men of the fleet nevertheless betrayed by the tenseness of their breathing that they were impatient, excited.

Had Professor Schmidt neglected an important item in the preparation? Why, the Imperator should never have entrusted so much authority to the old fossil!

And then the professor began to speak.

MEN of the Imperial Navy, *(his tired old voice came quietly)* I have summoned you to hear my final message.

(Here Professor Schmidt was seen, in the background of the visiscreens, to be toying with the great super-neutron gun control panel, as he stood there on the heavily enclosed bridge of his flagship, the RAEDER, proudest in the Imperial Fleet. It was a habit of the professor's, to keep his fingers busy with electrical mechanisms. An absent-minded habit which he seemed to have acquired of late.)

All of you have been trained carefully—so very carefully—in the program of violent destruction against the two American continents. I want, first of all, to go over the background of the past twenty years, so that you may fully understand the historical importance of your mission.

(The personnel of the fleet, especially the officers, who had more latitude, stirred restlessly. Professor Schmidt was obviously taking a leaf from the Imperator, who upon every occasion—even though he was old, over seventy-five—expounded at great length the achievements of his rule.)

In the year 1943, I discovered a method of producing the isotope of uranium—U-235—in small but practical quantities. As I recall, certain Americans figured out that in their currency, the six ounces of U-235 which I extracted cost $175,000 per ounce.

Scientists in no other land were able to duplicate my achievement; of that, the Imperator made certain through his espionage system. Therefore he had constructed for me a "space ship"—an aluminum, torpedo-shaped vehicle capable of travel through the void. The rockets that powered that space vessel were driven through the vast reaches of the sky by controlled explosions of U-235.

The object of that voyage was to collect a large quantity of U-235 in its natural state, which our astronomers were convinced was to be found around

the Tycho crater on the moon. You see, the existence of U-235 on the moon was detected by spectroscopes, when the sun shown on the pure U-235, heating it, and extremely weak rays of it were reflected back.

The formations around Tycho crater, I might point out, have long been known; and in fact are visible with opera glasses or even the naked eye. But these formations had never been identified. Our astronomers said they were U-235. Astronomers in neutral countries sneered that the spectroscope could only show the elements which exist on the sun, as seen through sunlight. But our Imperator, men of the fleet, never misses an opportunity.

He reasoned that if U-235 did exist on the moon in its natural state, the deposit would be of inestimable value to the Fatherland. As you will remember, in 1943 the North Sea Empire was still holding out, and the two American continents were arming to the teeth. A veritable stalemate had set in. It had to be broken—and quickly.

Therefore I, Johann Schmidt, was dispatched with an associate, Professor Hermann Hess, to the moon in the first rocket ship voyage ever made. You will perhaps recall from your history books that many doubted the Imperator's wisdom in sending us out into space. It was said that the rocket ship would blow up on the way; that even if it reached the moon and the crater of Tycho, it would never be able to take off back to Earth.

How stupid were those doubters! They should have known that the Imperator is always foresighted—that he never plans a move that does not come out exactly on schedule.

WE landed on Tycho, Professor Hess and I. And we found U-235 —great quantities of it, rich beyond belief. As you know, this element is an inert white powder, and we found there was no danger in handling it. We had brought along containers—a hundred containers having a capacity of one hundred pounds each. These we filled to the brim, and then took off to return to the Fatherland.

(The deputy commander-in-chief of the Imperial Navy felt he had sufficient authority to permit himself a yawn. After all, he figured, that old windbag of a professor would eventually talk himself out. Then the men could go back to sleep; meanwhile the vast fleet continued on its course.)

But, men of the Imperial Navy, you do not know what actually happened on that return trip. You do not know, because until this minute it has been impossible for me to reveal the secret. You see, men of the fleet—and you in the Fatherland at home, who may be listening in to my words through rebroadcast—I MURDERED PROFESSOR HERMANN HESS.

(Here there was sudden consternation throughout the fleet, as highly placed officers eyed each other nervously. The deputy commander-in-chief had abruptly silenced his yawn when the professor had said "you do not know what actually happened on that return trip."

It was a standing instruction that no secrets could be kept from the Imperator. Once Schmidt's admission of his guilt had come through the loudspeakers, the deputy naval officer had quickly signaled Naval Headquarters in the Middle European Confederation. Almost at once, rebroadcasting of Schmidt's address had gone over the air and was now being heard by the Imperator himself.

Because, for the duration of the campaign, the Imperator had moved into Naval Headquarters, to be in constant

communication with the fleet. The Imperator was a genius of detail; he always planned every move perfectly. At this very moment he sat with a harsh frown on his uncompromising features.

So Schmidt had killed his associate on the flight back to Earth. If the great Imperial Navy were not successful to the last item of destruction, the Imperator told himself, Schmidt would be purged from the ranks of the Fatherland. But if the fleet accomplished every objective on schedule, then the professor would doubtless have to be officially forgiven.

But still the Imperator frowned. He hated men who disobeyed his slightest wish: yet he had mixed feelings toward Professor Schmidt. After all, the old fool had been absolutely loyal for many years.)

Yes, I was forced to kill Professor Hess because he was the only obstacle in the way of future peace, freedom, prosperity and happiness for the whole human race. Twenty years it took for me thereafter to lay my plans; twenty years, during which the great North Sea Empire was humbled into the dust.

Twenty years of bloody conquest by the Fatherland, men of the fleet! A few leaders of the conquered North Sea Empire escaped to the North American continent, where they have kept up an ineffective policy of sniping at our cargo ships for all that time.

It has been almost an armed truce, while we of the Middle European Confederation prepared a great naval armada to smash the remnants of resistance in the American hemisphere for once and for all. But while the Imperator built this gigantic fleet of five hundred superdreadnoughts, aircraft carriers, destroyers and submarines, at an untold cost for the amount of U-235 needed, I too, Johann Schmidt, have not been idle.

I, Johann Schmidt, whose only nephew, Karl Lieber, was—

THE IMPERATOR was on his feet, raving.

"You fool!" he screamed, rushing over to the bemedaled, grossly overweight figure of the chief of staff for all the Fatherland—Supreme General Wilhelm Schacht.

"You fool!" he repeated, shaking his small fist under the other's face. "Why did you not tell me that Karl Lieber—that treacherous swine!—was a nephew of Professor Schmidt? Lieber, that dangerous revolutionary who believed in popular elections and a free press and other stupid, archaic things like that! General Schacht, you have made a grave error and -"

"But your Excellency!" cried the chief of staff. "I can explain everything—er—uh—later. But first we must forestall Professor Schmidt, before he does great damage to the Cause! Please, your Excellency, may I instruct the deputy commander-in-chief of the Imperial Navy to have Professor Schmidt taken into custody at once—"

"Do not interrupt me!" shrieked the Imperator. "I will not tolerate being interrupted when I am making a speech — WHAT!" he abruptly remembered, as Schmidt's voice continued to come in through the loudspeaker, his angry, earnest face clearly projected on the headquarters visiscreen. "Why have you not silenced that man?"

"But your Excellency," pleaded General Schacht hysterically, "I just telling you—"

"Silence!" roared the Imperator. "I shall give the order myself!" He rushed across the room to a microphone and barked at it,

"Deputy Commander Herringfleisch, arrest Professor Schmidt at once! Have him brought back here immediately by

plane. I, myself, will deal with that traitor! I will personally break every bone in his body! I mean, I will see that it is done by someone else! And then I will—"

—TORTURED TO DEATH, *(Professor Schmidt went on)* determined that from that moment on, I would leave no stone unturned until the Middle European Confederation was smashed into dust!

Ah yes, I can well imagine that at this very moment, Imperator, you yourself must admit, even in your cruel heart, that in some way which you do not understand, the end is near. Yes, Imperator, I can see you now in the visiscreen—you are standing very close to it in your headquarters. The visiscreen, you know works both ways. You can see me—and I can see you.

But I am not listening to you, Imperator. I do not have to. I have merely turned off the audio switch—see? *(Professor Schmidt pointed to the control.)* Ah—now that evil face of yours has come up to the visiscreen, and you are scowling horribly.

You will scowl even more furiously, Imperator, when I tell you that I am absolutely impregnable here in my small but very secure quarters.

So—I see from your expression that you remember! Yes, Excellency, now you recall why I had my own private headquarters on this flagship built apart from the control turret, which the deputy commander-in-chief, Herringfleisch, occupies. The thickest steel was used, Excellency—remember? It was only a childish impulse on my part, the naval architects thought, and they let me do as I liked.

They let me do even more, Imperator. They installed on this ship the greatest neutron gun ever invented—my own special design. And—and, Excellency, *(the old professor was shaking with excitement)* they even permitted me to install my own control panel, so that I, as commander-in-chief, could aim and fire my great neutron gun as a signal to commence the greatest battle in history.

But it will not be a battle, Excellency—it will be a holocaust of destruction! Yes, and even more— But Imperator, do not be so impetuous! I can see your ugly face shouting commands. You would have my voice cut off from the loudspeakers. But I too, Imperator, pride myself on taking care of details.

I am sure you will be pleased to know that there is a duplicate control system. I designed this great flagship myself, you will remember. I told you that it was necessary for me to do so, in order to install the U-235 atomic motors properly. And so when I planned this ship, I saw to it that there was a duplicate cable system, connecting my visiscreen and audio-speaker with the radio room.

The first cable is easy to cut—the second is embedded so deeply in the steelwork of this ship that your men will not find it in a week. Further, I also have a direct line with the radio room, and a panel of meters. See—it is on the same panel as the controls for the neutron gun. If you cut off my first cable, I have merely to move a switch, and the radio room will go off the air. It would take many hours to get it working again.

"THAT FIEND!" screamed the Imperator to his assembled naval officers. "He would ruin all my plans! We must blow up the flagship *Raeder* and kill this Schmidt! Otherwise he may do great damage!"

"But your Excellency," bleated Supreme General Wilhelm Schacht, "Deputy Commander-in-Chief Herringfleisch

is also on the *Raeder!* He is the greatest naval expert of all time—you yourself said so! He cannot be replaced—er, not until after the destruction of American resistance, for then he would be a great popular hero and might become too ambitious: he would have to be purged. But right now, we cannot spare Herringfleisch!"

"Silence!" screeched the Imperator. "I alone make decisions!" His ferocious scowl became momentarily thoughtful. "Hm-m—maybe I should humor the man, promise I will make him sub-Imperator, with his headquarters in the Americas. Yes, that is a capital idea!"

He rushed back to the visiscreen and began shouting persuasively into the audio-phone.

OH—greetings, Imperator! *(Professor Schmidt continued.)* I see you are attempting to speak to me. Stupid dolt! Did I not tell you I had turned off the loudspeaker? What? But do not curse so, I beg of you. It will do you no good. Perhaps you might care to listen to what I have to say, although I shall not talk much longer.

(Professor Schmidt glanced at a chart and then at his own private chronometer. His face was at once deeply satisfied and infinitely tragic.)

Yes, Imperator, I told you twenty years ago that Professor Hess was drowned when our returning space ship fell into the North Sea. He went to the bottom, true enough, but I had choked the breath out of him. He was utterly loyal to you, Imperator. With the amount of true U-235 on board that space ship, you could have set out to destroy the Americas at least fifteen years ago.

But I told you there was no uranium deposit on Tycho—merely salt. I told you further we had had a misfortune on the returning rocket vessel, which caused it to crash in the North Sea. Crash, your Excellency, after I had set the controls that way.

And so it has taken me nearly twenty years to refine enough U-235, at an incredible cost, to power the atomic motors of this vast armada. I held you up for twenty years, Imperator, hoping that the rest of the world could defeat you in that time. But that it could not undertake—because you were too powerful, too thorough.

I, too, Excellency, am thorough. Too thorough, perhaps, for my own good; for I shall not live to the great era of peace and freedom that my death will usher in throughout the world.

You see, Imperator, there are still ten thousand pounds of U-235 at the bottom of the North Sea, in the scuttled rocket ship. That ship lies only a few yards from this very flagship now, as I myself plotted the course. Behind me in long miles sails the greatest armada of all time—five hundred terrible warships, each with atomic motors that permit speed up to sixty knots per hour.

These ships can outrun and outmaneuver any other naval vessel in the world, as your own spies have so well confirmed. But, I am afraid, they will not be able to run now. Because, Excellency, I see *(Professor Schmidt glanced quickly at a small dot on the chart, then at the chronometer, finally at the angle of the great neutron gun, as indicated on the control panel)* that in twenty seconds, we shall be directly over the spot where the space ship sank.

It may also interest you to know, in the seconds that I have left to tell you, this broadcast is being heard by the Americas. I made sure of that. For they will not be penniless as are the European nations, through your draining of the coffers in search of the meager supply of U-235 that powers this

doomed armada of yours. Yes, Imperator, they will be able to build a rocket ship, go to the moon, and get enough U-235 to bring about the golden age that they know how to bring, and have the goodness in their hearts to bring. They are not murderers like you, Imperator!

But, I must finish my story—

Twenty years ago, Excellency, I crawled out of that sinking rocket vessel and made my way on a makeshift raft to shore. Twenty years ago I planned the end of your horrible regime —and the moment has now come! I now press the trigger-switch of the great neutron gun—

"FLASH! This is Station Five-oh-six, Anglo-American Broadcasting Syndicate. The War Department has just made the most sensational announcement in its history! Fellow Americans, it has just been learned that the naval headquarters of the great Middle European Confederation has been engulfed by a tidal wave of indescribable proportions!

"A North Sea Empire scouting plane, making a reconnaissance flight over the North Sea from a secret base near Iceland, has just radioed the War Department that a tremendous catastrophe —a catastrophe to our ruthless enemies —has taken place.

"The observer reports that, while he was flying at an altitude of ten thousand feet during the night over the Confederation's Naval Headquarters, a great wave of phosphorescent water suddenly swept in from the North Sea and wiped out everything in its path!

"While the War Department cautions against overoptimism, it is believed beyond a shadow of a doubt that the Imperator, our most hated enemy, had established his own headquarters there, to observe the progress of the impending battle between his Imperial Navy and our own hopelessly outclassed fleet. The armada had been assembling for weeks, as was reported by other air observation scouts, but because of bad weather it had been impossible to determine when the armada would get under way.

"Now it is confirmed, in addition, that the entire Imperial Navy was also sunk in the great explosion, the greatest explosion of all time.

"The exact cause of the explosion has not been made public, but the War Department has knowledge of something that happened on the great warships.

"But it is a scientific fact that when neutron is bombarded at the isotope of uranium—U-235, discovered in 1940—a terrific detonation will be set off, provided the U-235 is immersed in water.

"And considering that fact, we must give credence to a strange broadcast that originated from somewhere in the European hemisphere just before the explosion. A broadcast given in the voice of an old man who said he was Professor Johann Schmidt, who made the first, and only rocket flight to the moon, years ago, to bring back a supply of U-235, and returned to say he had found only salt.

"If it is true that Tycho's rays are really U-235, as the broadcast said, America now holds world peace in her hands, given to her by the incredibly brave sacrifice of history's greatest scientist, Professor Johann Schmidt.

"For we must believe it was he—no other source of power than a sunken space ship full of U-235 could have caused that tremendous explosion—an explosion that Professor Schmidt planned for twenty years to bring about—at exactly the right time to destroy the power of the Imperator, and although he may not have planned it, the Im-

perator himself.

"At any rate, keep your television sets tuned for the latest developments. This much at the moment, however, seems clear: the Imperator has undoubtedly gone to his death, and the American hemisphere is definitely saved from the threat of an overpowering naval invasion.

"And by the grace of God, and the heroism of one man, we face a new age, a golden age of peace, and a Utopia of untold atomic power, to be used for good. Freemen of the world, salute Professor Johann Schmidt, Earth's most magnificent hero!"

THE INVISIBLE WHEEL OF DEATH

(Continued from page 107)

Death caught him—at the same elevation where it had struck the first prisoner—and he slipped into a ravine, lay there with one arm sticking up in the air.

"Vida!" Ilando called in a voiceless whisper. Shaking, bloodless, he edged toward her. "Vida, your plan—"

Vida's eyes flicked toward Ilando, she gave him a slight wave of the hand that was meant to reassure him; at the same time a hint of mocking sarcasm touched her lips.

Ilando's eyes danced with mad terror. He thought he saw prisoner number three try to exchange a sign with Vida. Prisoner number three got the same trifling wave of reassurance that *he* had got.

Then prisoner number three raced up the ascent and fell limp like a shot dog, and the crowd screamed with delight.

Ilando turned to Theban, caught a glimpse of the watch.

"You know this deal, Theban!" Ilando's breath hissed.

"I don't know anything!" Theban retorted.

"You do. For God's sake, don't let me down—"

"I've never let you down—"

"Then tell me when to run, dammit, you've got to—"

"My turn comes ahead of yours," Theban muttered. "You'll see me die, just like the others—"

"You know the secret. You'll get through. Signal to me from the top!"

"I would to God I could!"

"Look!"

The crowd broke out in a pandemonium of agonized wails and boos. The mass of bodies weaved and the hundreds of arms pointed. *Prisoner number four was running through!*

All the way he ran—on and on—to the very top of the ascent. The guards shot their flame guns at his heels—at his body—but he dropped into a nook of protecting earth, rolled his burning clothes in the soil, made a swift leap over the final mound and was gone.

Suddenly the noise of the crowd leaped into the high shrill pitch of screaming and shrieking. Vida was no longer at her post.

Vida was on her way toward the ascent of death. Vida the Beautiful, Vida the heroine of the Draz-Kangs, was riding up the incline—in the arms of prisoner number six—Ilando Ken.

VIDA was screaming and fighting, but Ilando Ken clutched her with steel muscles that wouldn't let go. Up—up—running—faster—faster—

The flame guns shot white hot ropes on either side of him. Ilando Ken crushed the girl closer within the protection of his arms, fought to keep her out of the flames that began to engulf his own clothes—

It happened as instantaneously as it had happened each time before. The

two bodies simply fell limp.

Both bodies rolled down toward a ravine at one side of the ascent; and as they rolled, the flames that had threatened them were extinguished. Abruptly the body of Ilando stopped. The form of the girl came to rest across the young guardsman's outstretched arm.

A long period of confusion followed. Theban was too much stunned to know just what had happened. He had dazedly looked on while some Draz-Kang officials had recovered the body of Vida the Beautiful; he vaguely realized that they had dragged her down the incline a short distance by means of ropes, that they had borne her to the edge of the crowd. . . .

But now his senses sharpened to brittle edges. The Carnage Ring's voices were shouting in harsh bitter tones, and the crowd was coming to order.

"The least we can do for Vida," the spokesman shouted, "is to finish up this ordeal—as she herself would have finished it."

There was a silencing moment. Theban felt the hundreds of eyes turn toward him. The guards ushered him out in front of their line and made ready with their flame guns.

"Go!" the spokesman cried.

Theban obeyed. He moved at a slow pace—as slowly as the flame guns would let him. They did not hurry him. Nor did the crowds clamor for a faster race. Their hilarious mood had fallen with the fall of Vida.

Theban stalked on. The death level, he knew, was only a few paces ahead of him. He glanced at his watch. A thousand thoughts raced through his mind—his meeting with Ilando—the lame old Marshal up on the planet Frigio—the black dye on Ilando's hands—the deserters whom he, Theban, had sent to the firing squad—

He glanced at the watch again. Those endless *decis* that he and the mountaineer had spent experimenting with the wheel of death were all lost now. His mind was only a welter of confused figures. The mountaineer had been right about it—there was no infallible regularity to the death spokes—

Three more steps would bring him to the fatal level. He drew a deep breath as if to make a dash for it. Then, instead, he stopped.

He stopped, bent down and picked up the limp body of Ilando Ken, placed it upon his shoulder. With calm dignity he walked upward into the realm of death—

ABOVE the rising chatter of impatient onlookers he heard the distant clap of thunder. Perhaps it would be the last sound—

But he was already within the range of the death beams—he was still alive—he still had a chance—

Like something out of a cannon he flew up the hillside—up—up—

At least he had lived long enough to hear a second clap of thunder—and a third—

He was almost through the danger zone. The flame guns were not chasing him. *Why not?*

He shuffled the body of Ilando for a better grip, bounded upward with all his strength — upward — upward — *he was out of it!*

Never did he look back until he had crossed the last summit of the ascent over the crater's edge. Then, when no flame guns had yet splashed fire at him, he laid the body of Ilando Ken down tenderly, crept back to the edge—*and stared!*

The crowd was not watching him. It had turned with one accord to view the approaching storm. But the storm was not coming out of a cloud—

(Concluded on page 123)

Hammer OF THE Gods

by JOHN YORK CABOT

To the tribe the God Hammer was the symbol of authority, but to Tokar it was more. It was worth attaining kingship to pry out its secret

DEEP in the jungle the tribal drums were throbbing with savage passion, their pulsating rhythm carrying clearly to the ears of the gigantic, superbly muscled barbarian who moved in great strides along the tangled underpath.

He was a handsome creature, this barbarian. Handsome as the panther is handsome, or the man-killing tiger. Strong features, cruelly chiseled, were beneath his mat of fierce hair. His body was hard and brown, clad in the skin of a jungle cat. And yet for all the strength and power of him, he moved through the twisted underbrush with the stealthy swiftness of an animal.

Across his back, carried as carelessly as though it might be but a load of twig kindling, was the still bleeding carcass of a freshly slain boar. Food for the tribal feasting. The smell of the animal's blood, hot and sweet in his nostrils, made the barbarian grin in anticipation.

"Ayi," he thought with savage satisfaction, "I, Tokar, return to the tribal campfires with meat for the bellies of my people."

And he grinned again in wolfish glee at the thought he had half-whispered in the murky twilight. For this very evening he, Tokar, The Mighty, would gain supremacy among his tribal fellows, would gain the honor of Tribal King. He, Tokar, would gain all this by overthrowing Orlo, the present tribal king.

"Ayi," he told himself righteously, "do I not bring the most meat to the tribal kettles? Am I not the swiftest of foot and the quickest in battle? Am I not Tokar, The Mighty? It is only right that I wrest the rule of the tribe from the weak hands of Orlo!"

The thought make Tokar feel good inside, and he took up a savage humming chant as he strode along, unconsciously moving to the rhythm of the booming jungle drums. For Tokar was not only thinking of the honor which he had long felt was due him, the honor of tribal kingship. He thought, too, of the spoils that would be his when he had slain Orlo.

Orlo had rich compounds, and Orlo, as befitted a tribal king, had strong women to work for him. All these would go to Tokar. All these and something else— The God Hammer.

At the thought of the God Hammer, the gigantic barbarian ran his tongue across his lips, shivering involuntarily. For was not the God Hammer a magic thing? Was it not glittering and shining in its magic power? Was it not the most prized trophy of the campfires?

Then, Tokar, bellowing wildly, plunged in on Orlo, his club smashing through the king's guard

"Ayi," Tokar wet his lips in anticipation at the thought, "the God Hammer, too, will be mine. Before the campfires are cold in the murk of morning, it will be mine!"

A QUARTER the length of a man's arm, cold and hard, with a hammer-like head on one end—that was the God Hammer. But, unlike war clubs, it was not of stone. It was of some magical substance, smooth and solid. Tokar had touched it once, unobserved, by Orlo, and he shivered now, remembering the feel of it.

At the blunt end of the God Hammer there was a sort of magical ring, the very sight of which filled Tokar with a burning primitive curiosity. Again and again he had turned over the mystery of this ring in his mind, and again and again had found no answer. His desire to possess the God Hammer was increased to a feverish intensity because of his insatiable curiosity over the magic ring. The possession of such magic would be worth even more than Orlo's rich compounds and strong women.

Thus Tokar reasoned, while he hummed his savage chant and strode lightly along the tangled trail to the rhythm of the jungle drums.

All day, as he had stalked the wild boar, the thought of the God Hammer had been in his barbaric mind. And now, as his great strides bore him toward the village campfires at the end of day, the very drums seemed to throb his desire. The God Hammer. The God Hammer. Tokar, Tribal King, Possessor of The God Hammer.

The huge barbarian quickened his step, eager to gain the village. Already he was anticipating with raw relish the challenge he would fling at Orlo. On and on he moved, while the twilight deepened into dusk, and the dusk into night.

At length, through the tangled foliage of jungle growth, Tokar saw the first flickers of the flaming tribal fires. The path he trod grew wider and more clear, until at last he had view of the village a scant few hundred yards ahead.

By now the jungle drums were booming, thundering, in his ears, and the shrill cries of the dancing women came clearly to him. He smiled, knowing that the ceremony for the Feast had started, that Orlo was already at the campfires.

Dogs came dashing up to him from the village, yapping and nipping at his heels, followed by children of the tribe who squealed joyously at the sight of the freshly slain boar he carried.

Tokar was grinning widely now, his sharp white teeth shining like wolfish fangs, and he strode forward toward the campfire circles where his fellows awaited him. The campfire circles, where the drums throbbed and the women danced, and Orlo sat unsuspecting—holding the God Hammer.

Alone, Tokar made his way to the largest of the campfire circles. The Circle of the Braves, where Orlo presided over the wise men and tribal elders. Where Orlo ruled with the God Hammer in hand. Tokar was conscious of the admiring eyes of his fellows as he strode into the center of the circle.

With a grunt, Tokar swung the slain boar down from his thickly muscled shoulder, dropping it to the earth. The cries of acclaim that came from his fellow tribesmen were music in his ears. Then the old crones, babbling happily, came from their kettles to group around the carcass of the kill. They stood there, motionless, while the campfires roared approval and Tokar, in the custom of the tribe, drew his stone knife, hacking off the left hind leg of the slain beast.

The drums were pounding wildly,

now, while Tokar wrenched the leg free from the carcass, holding it aloft triumphantly, sinking his fanged teeth into the raw meat. Fresh blood ran down the sides of his cruel mouth.

BUT even as he gnawed the boar's leg, Tokar's glittering eyes sought out Orlo. Sought out Orlo, who squatted in state on a mud dais less that twenty yards from him, holding the God Hammer as a king might hold a sceptre.

Orlo, too, was huge and heavily muscled. But he was of lighter complexion than Tokar. His hair was light, while Tokar's was dark. And Tokar knew that he need have no fear of Orlo, for he, Tokar, was faster, stronger, than the man who held the God Staff.

Tokar dropped the boar's leg, holding his great arms high for silence. The wild cadence of the drums ceased abruptly, and Tokar faced Orlo directly, his wolf fangs exposed in a menacing grin.

Loudly then, Tokar trumpeted his challenge. Bellowed it so all could hear.

He saw the startled incredulity that leaped to Orlo's eyes, knew, with intense satisfaction, that he had caught him unprepared. Tokar grinned again, moved cat-like toward Orlo's dais.

Orlo had risen from the dais, God Hammer still in hand, surprise still stamped on his face. After the first shocked silence that fell over the campfires at Tokar's challenge, a throaty, savage murmur was rising from the tribesmen. A guttural growl of delight. There would be battle to give zest to the feasting.

Those around the fires remained motionless, according to tribal custom, making no attempt to interfere on either side. Tokar was going to fight for kingship. If he won, he would lead them. If not, Orlo would slay him. It was as simple as that. Tribal tradition gave any brave the right to challenge for kingship.

The drums had started again, and the fires leaped higher as men threw wood on them to better illumine the battle scene.

Tokar and Orlo were less than four feet apart, now, and were starting the preliminary circling, looking for openings. Orlo still held the God Hammer, and Tokar, seeing this, drew his stone knife again. He could read the fear in Orlo's eyes, and knew that the other could not depend on the magic of the God Hammer to aid him.

Then Tokar, bellowing wildly, lunged in on Orlo.

His great paws found Orlo's waist, and his thickly-muscled shoulder drove hard into his adversary's stomach. With his free hand, Orlo seized Tokar's mat of black hair, and with his other he tried to bring the God Hammer club-like down on his opponent's skull.

But Tokar had thrown him off balance, and now they were both pitching to the earth. Tokar had one hand free, now, and was driving his stone knife again and again into Orlo's shoulder, feeling the hot blood run stickily against his own throat.

They pitched wildly back and forth on the ground, first Tokar, then Orlo, gaining top position. But as they struggled, Tokar drove his stone blade home again and again wherever he found flesh. By now, some of Orlo's blood was in Tokar's mouth, and the taste filled him with triumph and strength.

Again and again, Tokar managed to roll free from the blows of the hard God Hammer, and at last he was able to seize Orlo's arm, bending it back until it snapped like a dry twig. The Hammer fell uselessly to the ground, and Tokar heard Orlo's grunt of pain. Then he sprang to his feet, seizing the

God Hammer as he did so.

Orlo was slower rising, but Tokar permitted him to do so while the wild hammering of the drums and the babbling roar of voices from around the circle filled him with a heady intoxication. In his hand was the cool, hard, club-like weight of the God Hammer. In his heart was the savage certainty of victory, for Orlo was badly wounded.

TOKAR watched him pull himself to his feet, grinning at the sight of the blood that soaked his opponent's body. Orlo had been slashed by the stone knife at least twenty times, and his right arm hung broken and useless by his side.

The tribesmen were screaming for the kill, screaming for Tokar, their new king. And Orlo, dazed, bloody, and beaten, swayed drunkenly before him. Tokar stepped in, raising the God Hammer high above his head.

Orlo was too late in putting up his hands to ward off the blow of the God Hammer. Tokar brought the shining, hard Hammer down on Orlo's skull with crushing force. Orlo started to slump to the earth, and Tokar raised the club again and again, beating him across the head with it until Orlo lay motionless and crushed on the blood-stained mud.

And then the savage cadence of the drums became a wild, hysterical rhythm, while Tokar, licking his lips and baring his fanged teeth in wolf grins of triumph, held the God Hammer high above his head, waving it back and forth as a symbol of victory.

The flames leaped weirdly around the circle, throwing into sudden brilliance victor and vanquished, and the drums pitched into an incredible frenzy. Around the campfires a harsh, barbaric chant began, taken up by the voices of all the tribesmen until it was a wild, maddened song of blood and triumph.

Tokar made his way to the mud dais which had been Orlo's throne until now, head held high, chest thrust out, strutting like a peacock, the wild shouts of his fellows ringing in his ears. The women started a tribal dance, and crones brought food and drink to him.

But Tokar paid scant attention to all this, for his eyes were fixed lovingly on the God Hammer. It was his now. Ayi! His to control, his to work magic with. And he could find out, now, its secrets. Even to the magic ring.

In rapt fascination, Tokar inspected the God Hammer, his fingers touching the ring as he turned it about in his hands. There were queer symbols on the staff of the Hammer, evidently God Writing. Tokar's brow creased in perplexity. The God Writing was unlike the picture symbols which the wise men of his tribe inscribed on cave walls. Indeed, these were God Symbols.

He shook his head, looking at the symbols. They were strange, perfectly cut in the staff of the Hammer.

Tokar grinned, licking his lips foolishly in bewilderment. Perhaps, later, he would let the wise men of the tribe attempt to decipher these symbols. But now—there was the ring.

Inspecting the ring closely, Tokar saw that, by pulling it, he could release a pin at the base of the Hammer's head. Grinning in savage excitement, Tokar pulled the ring.

Tokar, the Mighty One, was momentarily conscious of a blazing, blinding, searing, explosion. An explosion which insured the fact that Tokar would never be conscious of anything again. . . .

Never would the wise men of his tribe have the chance to decipher the strange, evenly cut God-Symbols which Tokar had seen on the base of the God Hammer. The symbols that read—

"Krupp Munition Works, 1940, Hand Grenade"

THE INVISIBLE WHEEL OF DEATH

(Concluded from page 117)

It was coming out of a space ship—a huge, slow-cruising white boat bearing the insignia of a white comet on a blue diamond. And the thunder that Theban had heard was being *dropped* from that boat in the form of explosive bombs.

Where was the tower that had sent out the death beams? *It was gone.* No wonder Theban had passed safely through the Crater Killer. . . .

BEFORE DARKNESS fell, a small plane swooped down to pick up Theban and the bodies he was guarding. As he soared aloft, he caught a bird's eye view of the scattered groups of Draz-Kangs fleeing over the mountain tops.

"Wonder where they'll go now?" Theban asked.

"From what I know of them mountains, they'll come right back to their crater," said a familiar voice; and Theban turned to see his old friend the mountaineer blinking gently from the rear cabin seat.

"They'll come back to surrender," the purgier at the controls declared. "We've plugged the entrance to their nest, and we've got troops coming in by planes yet tonight to round them up. The real job was cracking that death-trap. But between your mountaineer friend's message and your writing in the swamp we knew exactly what to do—and more important, what not to do."

"Then you read my writing?" Theban asked. "I had a wonderful time wallowing around in that yellow mud."

"Look down," said the pilot. "You can see the fancy job of lettering you did."

Theban gazed down and saw the irregular lines of black water across one side of the yellow floor. The letters were badly twisted but still legible. They spelled the words, "DON'T LAND. DROP BOMBS." And there was a small signature: the figure of the white comet surrounded by a diamond.

Theban drew a long breath, rubbed his hand wearily across his stubble.

"What were you saying about the young guardsman," the pilot asked, "the one you took to be your assistant?"

"I simply said that he died while doing an important service for the White Comet Union," Theban said quietly. "I hated to lose him. . . . And still—well, he was afflicted with a strange malady—a partial blindness of a sort. Life would always have been pretty unbearable for him. And as I said, he died most heroically."

There was a little silence. The plane sped toward the Bronze Planet capital.

"Say," the mountaineer spoke up with good humored cackle. "I wonder if maybe I'm the only one of *me* in history. Huh?"

"The only one of *you?*" Theban echoed.

"Yes sir, see this badge they give me for meritorious service? I got that for chasing rabbits. You think that ever happened before? I doubt it."

CANINE SIXTH SENSE

The natural intelligence and intuition of animals, especially those touched by human domesticity, is inestimable. A Yorkshire terrier named Stoney, strolling with his master in 1907, passed a coal man preparing to unload coal into a cellar. Suddenly the terrier began worrying the man to prevent the unloading. The dog's owner at last captured the animal, who continued to bark and snap. Above the dog's outcry the two men heard a plaintive whimper. Investigation proved an infant had fallen down the coal trap, and unloading would undoubtedly have killed the young one.

SKIDMORE'S STRANGE

"Three minutes to go," came the killer's hoarse voice. "In three minutes you die, Skidmore!"

EXPERIMENT

BY DAVID WRIGHT O'BRIEN

Skidmore's life depended on the success of an untried experiment, thought transference across space

SO intent was Professor Skidmore, as he sat at the ornate mahogany desk in the solitude of his luxurious study, that he failed to hear the shuffling sounds on the fire escape just outside his window. So intense was his concentration, that he was also quite oblivious to the soft noises made by the window being opened.

Skidmore failed, too, to notice the intruder who made his way into the study through that window. He didn't see the tall, gaunt figure, clad in a shining black serge suit, with a black slouch fedora pulled low over his eyes; an intruder who carried an automatic pistol in his right hand.

Professor Skidmore noticed none of this, as he sat, head in hands, staring at a series of white cards on the desk before him. He was still totally unaware of the intruder's presence, even after the gaunt man in the slouch hat stepped directly before his desk.

The intruder's entrance had been that stealthy, and the white-haired Professor's concentration had been that determined. And now, even though the intruder had raised his automatic to a level with the center of Skidmore's high forehead, the old scientist was completely unconscious of his presence.

Which was possibly the reason why the gaunt intruder hesitated before squeezing the trigger and sending a bullet tearing into the famous brain of the man who sat at the desk. He hesitated, then brought his left hand smashing down on the desk.

Skidmore, in the manner of a man who has been rudely awakened, looked up instantly. Looked up into the ugly barrel of an automatic pistol, then into the gaunt features of the man who held the weapon.

"Wha—" Skidmore began, startled. Then his pale gray eyes lighted in recognition, and his ascetic features tightened in a mask of involuntary fear.

"I hope," said the intruder acidly, his tones gutteral, "that I didn't disturb you."

"Koblar!"

"Ah, you remember me," said the intruder menacingly. "You can remember me, Professor Skidmore, and no wonder." Beneath his black slouch hat his mouth flattened in a thin mirthless smile.

"Good God, man," the old scientist began, "put down that gun! I don't know wha—"

"Don't know why I'm here?" the man called Koblar broke in. "Surely, Professor, your mind is not as juvenile as all that. I'm here to kill you, Skidmore. To settle a score." He still held the gun fixed steadily on Skidmore's forehead. "You fired me from your laboratories some three months ago, Professor."

"You were incompetent."

The man called Koblar's eyes blazed. "You wanted my findings on the genodren formula!"

"Your findings were of no use to me, or to anyone. I can prove it to you now, as I proved it to you once before," Skidmore replied.

"Bah," snorted Koblar, his gaunt features contorting. "That is fool talk, and I am no fool!" The hand that held the gun was shaking slightly now.

GRADUALLY the fear had been slipping from Skidmore's features, and now they were again calm, wise, ascetic. He ran a blue-veined hand through his thinning white hair, closing his eyes momentarily as if to shut out a bad dream.

"You won't kill me," Skidmore said softly. "You won't kill me, Koblar, because you haven't got guts enough. Your lack of guts in the more dangerous experiments was one of the reasons why I discharged you from my laboratories."

Koblar's mouth went thin again, and the gun in his hand trembled more.

"That's a lie," he snarled. "I have courage!"

There was a hint of mockery in the old Professor's eyes. Mockery but no fear.

"I know you won't dare to shoot me, Koblar. I know it, and I can prove it." He paused. "You are a scientist, Koblar. Not a particularly competent one, but nevertheless a man of science. You have a certain amount of intelligence, enough to realize why you came here to kill me."

Koblar's lips parted in a sneer. "Quite."

"You want to get revenge," Skidmore resumed, "and to erase what your mad mind considers to be a stain on your honor. You know, as well as all our associates, that you were discharged for lack of nerve and incompetence. Killing me won't erase that knowledge from your mind. But if you could prove your nerve, especially to me, then you could kill me and be satisfied."

"I'm going to kill you anyway, Skidmore, so drop any ideas of tricks."

"This is no trick, Koblar," the old scientist said evenly. "I'm giving you a chance to prove yourself, and to get your revenge at the same time. It should make an interesting bit of experiment. As a scientist, it appeals to me."

"I am going to kill you," Koblar said harshly, "now!"

"Because your nerves are breaking, you know that another five minutes would leave you unable to do so!" Skidmore broke in swiftly. "Another five minutes and you'd crack, just as you cracked while conducting an experiment over the genodrene tubes. You lacked guts! You were afraid they'd explode."

Koblar hesitated, the gun in his hand still trembling in spite of the fact that his knuckles were white around it.

"You lie, time makes no difference!" he rasped.

"Prove it, Koblar, and you'll be able to go out of here knowing that I was wrong, that I paid for my ignorance." Skidmore's voice was persuasive.

"I am quite alone, here in my study. My servants are all out for the evening. There is no one, nothing to interrupt our little experiment, Koblar. Think, if you kill me now, Koblar, you'll know that I was right. But if you stand a

five minute strain—" Skidmore let the words trail off meaningly.

Koblar looked swiftly around the room, then back at Skidmore. Suddenly, his thin mouth split in a savage smile.

"You have an idea, Professor. It has just occurred to me that the experiment might prove interesting on *you.* I shall wait five minutes, and then I shall kill you. It should be interesting to watch *your* reactions as you know that every minute brings you closer to death."

As Koblar talked, he had moved over to an easy chair some five feet from Skidmore's desk. Now he sat down in it, his gun still trained on the old scientist's head.

"We will see," Koblar rasped harshly, "which of us is correct." He pulled forth his watch with his left hand, placing it on the arm of the chair in which he sat. "Five minutes, I believe, was the time you set. I will wait all of those minutes. Then I shall kill you, Skidmore!"

The old Professor nodded, pulling forth his own timepiece and placing it on the desk before him. On the desk beside the series of white cards. "I'll check, also, Koblar."

"They shall be minutes of silence, Professor," Koblar snarled. "Minutes of silence in which you can look at the hand of your watch moving slowly around to your death!" He paused. "Starting now."

FOR the second time that evening, old Professor Skidmore placed his head in his hands, staring down at his desk. But his eyes were not fixed on the watch. They were fixed on the same series of white cards. Neatly typed cards, six of them, on which was the legend, "Experiment in Extra Sensory Perception." The experiment which Koblar had interrupted.

Professor Skidmore's mouth tightened, thinking of the interrupted experiment. On the other side of Manhattan there was another series of cards, identically the same, on the desk of another scientist—one Professor Cardigan. Skidmore could hear Koblar's breath coming harshly, and wondered what the man would think if he saw the cards. For when Koblar had entered, Skidmore had been attempting thought communication with Cardigan.

And now, with five minutes in which to save his life . . .

Skidmore pushed aside the cards, on which had been written simple messages. The message he was going to endeavor to send would be totally different—if Cardigan received it at all.

The old man could still hear the labored breathing of his would-be assassin, and then he forced himself to eliminate all thought but the intense concentration on his message. His throat felt dry, and he knew that his knees would refuse to support him should he try to stand.

Skidmore thought: *Cardigan. Cardigan. A murder. Five minutes. Here in my apartment. Five minutes, Cardigan. Police. Phone them. Phone Police, Cardigan. A murder. Five minutes. Phone Police, Shelton Apartments. My suite, Cardigan.*

Koblar's voice, as if from a distance, said: "Two minutes have passed!"

The old scientist's concentration was intense, sweat beaded his brow: *Three minutes, Cardigan. Three minutes left. Cardigan. Hear me, Cardigan. Murder. My apartment. Shelton Apartments.*

* It was only six years ago, in 1934, that Duke University announced its epochal experiments in parapsychology, thereby raising that study of psychic phenomena from a pseudo-science to an exact science. Since then there have been many verifications from other laboratories of those classic researches. The strange telepathic and clairvoyant powers of the human mind have been amply demonstrated.—Ed.

Police, Cardigan. Get Police. Cardigan. Murder!

Faintly, like a trailing echo, Koblar's voice said: "Three minutes have passed, Skidmore. Two minutes before you die!" But the old scientist's head was bent, his jaw tight, and he didn't notice the acute trembling in Koblar's hand. Neither did he hear his voice a minute later. "One minute, Skidmore!"

Koblar had risen, was approaching the desk.

So intense was Skidmore's concentration that he didn't hear the footsteps in the hallway outside his apartment, and it wasn't until the first crashing blows landed on his door that he looked up. Looked up to see Koblar, face gone ashen, glaring swiftly at the door, then wheeling, face contorted in rage, toward the desk.

"Damn you," Koblar shrilled, "it was a trick!" And as he shouted, his finger squeezed again and again on the trigger of the automatic, the shots blasting deafeningly in the room.

And through the noise and confusion and gunsmoke, men were swarming into the room, seizing Koblar, moving to Professor Skidmore who crouched shaken behind the thick mahogany bulwark provided by his desk . . .

PROFESSOR SKIDMORE was trying to light a cigarette with hands that trembled badly. Koblar had already been removed from the apartment by the police. Others remained, some uniformed, some in plainclothes. A sergeant was taking a report.

"It's incredible, gentlemen," Skidmore repeated again and again.

The telephone on his deck rang suddenly, and Skidmore picked it up. In an instant his face lighted excitedly.

"It worked, Cardigan. Thank God, you called them in time! It worked, old boy. You saved my life!"

The Police Sergeant saw Skidmore's face swiftly change expression.

"But Cardigan," those in the room heard the old scientist bleat. "Cardigan, don't you know what I'm talking about? Didn't you get my communications? What? Not a word? No contact whatsoever?"

Professor Skidmore put the phone back on the cradle dazedly, turning to the officers in the room.

"He didn't get it," he muttered. "He didn't get a word of communication!"

The Police Sergeant, a fat, red-faced fellow, frowned. "You can owe your lucky break to the House Detective here at the Shelton, Professor. He tipped us off and got us over here in nothing flat!" The Sergeant pointed to a heavy-set, florid faced man in a derby hat. He looked like the typical House Detective in a movie, and grinned in modest embarrassment.

"Damnedest thing that ever happened to me, Professor," said the House Detective. "I was passing along outside your hall door about five or six minutes ago. Got the screwiest hunch I ever had in my life. Something just *made* me take a chance and call the cops pronto!"

"Five or six minutes ago?" muttered Skidmore bewilderedly.

"Might have been seven," said the House Detective. "But, Lord, I've never had such a powerful screwy hunch in my life before."

"What," Professor Skidmore managed to ask the House Detective, "is your name?"

The House Detective swelled proudly. "Cardigan, Professor. My name is Cardigan!"

THE END

Meet the Authors

DON WILCOX Author of
THE INVISIBLE WHEEL OF DEATH

DON WILCOX

I WAS born within a few miles of one of the geographical centers of the United States (there are three or four scattered around through Kansas) thirty-one years ago—back in the days when the creeks still ran and severe dust storms were something to be complained about.

I was brought up on public schools, swimming holes, musical instruments, and Mark Twain.

As a boy I learned how much fun it was to dig caves and what gruelling labor it was to hoe the garden—even though the former occupation afforded more blisters.

Eventually I underwent the transition from the dangerous life of a semi-civilized Tarzan to the far more perilous existence of an over-civilized school teacher.

While teaching English I would frequently admonish my theme-writing students to use more imagination! MORE IMAGINATION!! Poor kids—I longed to write their stories for them. George Bernard Shaw's words burned in my ears: "He who can does; he who cannot teaches." I desired to join the "does" class.

The desire grew when my wife and I began writing plays for high school students and discovered we could market them.

Returning to my alma mater, the University of Kansas, for graduate studies, I found interest in drama, journalism, and sociology. These studies offered juicy nourishment for the would-be writer. Then there was a creative writing class of five or six members who met at the home of an author to drink tea and lash each other's literary efforts—two wholesome exercises for budding authors.

I was treated to three years of serving on the sociology staff of a university, where I enjoyed sharing ideas with a few hundred students.

Later, my college vacations brought similar thought-churning exercises. Though a victim of the rural philosophy which exalts simple hard work to the skies, once I had the sweat glowing from the brow, the vacuum within became a playground for chance ideas. If you are a professional window washer or house painter, you know what I mean. Those silent hours of work contain some curious creative experiences, seldom brought to light.

Outdoor workers love to spin yarns. I found the errant harvest hands and the multi-colored rock crusher gangs full of stories—good and bad; also full of character, open to observation. There was the silent boss who watched over our rock trench. He and the sleepy old chimpanzee at the zoo could have changed places; no one would have noticed the difference. There was Lame John, a ragged haggle-toothed Negro, who taught me to swing the maul so the rocks would crack instead of rounding off. He managed his finances like an expert, bought winter groceries in July, was proud that he'd lost only three of his ten kids.

Perhaps these sidelights are incidental. Most of my hours have gone into academic pursuits. School teaching—more years than I dare count—then more university life, undertaken in '34 with a professional writing career now clearly in view. By this time I had published a few plays.

While a graduate student, I placed some articles with the Kansas City Star, sold a novelty musical comedy, captured some prizes in the Kansas Authors Club contests; dropped into a university instructorship in sociology (as a result of the state's economy program), which gave me contacts with many fine minds, young and old. I glimpsed endless avenues of research that lay waiting, tried a little, found it intriguing. It made you throb with the feeling that you were doing something vital—the same as our space explorers and laboratory heroes of fiction. Still, it did not answer my craving for creative activity.

However, my chance meeting with the editor of AMAZING STORIES proved to be a milestone. His generous suggestions were calculated to put an end to the blind stabbing of dizzy free lancers, give direction to their efforts. This he did for me.

This sketch needs a supplement in which the pronoun "I" is omitted, to tell the great share which parents, relatives, friends, teachers, and editors have had in giving me a start. My wife is my chief critic and assistant. Our three-year-old red-haired daughter furnishes diversion.

I appreciate the reception the readers of this magazine have given my stories.—*Don Wilcox, Chicago, Illinois.*

QUESTIONS and ANSWERS

This department will be conducted each month as a source of information for our readers. Address your letters to Question and Answer Department, AMAZING STORIES, 608 S. Dearborn St., Chicago, Ill.

Q. *How did magnets get their name? Was it from a Greek God?—R. Madlin, Elyria, Ohio.*

A. No, although the source of the word magnet is Greek. In ancient times there was a district in Thessaly near the Aegean Sea which was known as *Magnesia.* From this region was obtained an iron-colored, stone-like material that was largely used for building purposes. The Greek called it *Magnetis lithos,* which meant Magnesian stone, while the Romans called it *Magnes,* and so from these roots we get the words *magnet, magnetic,* and *magnetism.*

This so-called stone, which at the present time is commonly called *lodestone* (leading stone from its use as a compass in navigating ships), but whose scientific name is *magnetite,* is a magnetic iron ore, the oxide of which has the chemical formula of Fe_3O_4.

* * *

Q. *The sun's light is supposed to reach the earth in about 8 minutes. Has any more accurate figure been determined?—M. Pinel, Rochester, N. Y.*

A. The light of the sun reaches the earth in 498.7 seconds, which is slightly more than eight full minutes.

* * *

Q. *Have any new facts been discovered concerning Pluto, the newest addition to the sun's family?—W. Wallace, Williamsburg, Pa.*

A. Yes, we have quite a few figures on Pluto. Its mass is probably about 0.15 of that of Earth. Its average distance from the Sun is about 3,700,000,000 miles. Perihelion will occur in 1989 and Aphelion in 2114. Its position in the sky is in right ascension 8h and in declination plus 23°. It lies in the constellation of Cancer. Its mean daily motion is 14.325″, sidereal revolution 90470 days, maximum distance from sun 4,300,000,000 miles, minimum distance from sun 2,750,000,000. Its eccentricity of orbit is 0.248 5200, its synodical revolution 367 days, its inclination of orbit to ecliptic 17° 8′ 36.1″, its orbital velocity 3.70 miles per second. Other facts: mean longitude at Epoch 150° 55′ 50″; mean longitude of the perihelion 223° 22′ 57.6″; annual sidereal motion, plus 0.2; mean longitude of the ascending node, 109° 29′ 52.5″; annual sidereal motion, minus 1.5; light at perihelion, 0.001; light at aphelion, 0.001.

* * *

Q. *Is it true that Niagara Falls is moving backward perceptibly?—A. Marks, Milwaukee, Wisconsin.*

A. Yes The brink of Niagara Falls is receding, or moving back, at the average rate of 2½ feet per year. The great cataract, as the outlet of the four Western Great Lakes which constitute half the fresh water of the world, has a volume of water almost unaffected by the seasons, and this constant wearing away of the rock bed is gradually moving the falls upstream.

* * *

Q. *What is electromotive force?—E. Elsner, Wichita Falls, Kansas.*

A. To make water flow through a pipe there must be a force of some kind acting on the molecules of it to move them along through it, such as gravity or the pressure developed by a pump, and the moment the force is removed, the water will stop flowing. Now, to make electricity flow in a wire or other conductor there must be a force acting on the electrons of it to move them along through it, such as a battery, and the moment this force is removed the current will stop flowing. The force that makes electricity flow in a conductor is called electromotive force and it is abbreviated E M.F.

* * *

Q. *How far can sound actually be heard?—Harold Weber, Baton Rouge, La.*

A. Theoretically, sound can travel all the way around the world, if the sound is loud enough. On a day in December, 1933, a dynamite explosion set off on the Arctic island of Nova Zembla was detected at Berlin, more than 2,000 miles away. Thunder, which is the loudest common noise, never has been heard unmistakably more than about 20 miles from the flash. Continual cannon fire has been heard 100 miles away and somewhat doubtfully as far as 300 miles away. The landing of the great Siberian meteor, which fell on June 30, 1908, was heard 400 miles away and affected weather instruments in Europe. The world's loudest noise, the volcanic explosion of the Island of Krakatao in 1883, was heard by human ears as far off as Bangkok, something more than 1,400 miles. At La Courtine in France, in 1924, tons of excess war munitions were exploded, under scientific control and reports obtained from listeners and instrument stations in all directions over Europe. The maximum distances unmistakably recorded in this instance were but little more than 200 miles. This distance was separated from the actual explosion by one of the "zones of silence" usually encountered in such experiments, a zone in which the noise is unheard although it is heard both closer to the explosion and farther away. This also explains longer distance records, such as the one from Nova Zembla. Sound travels in air at the rate of 1,266 feet per second.

Science Quiz

The following quiz has been prepared as a pleasant means of testing your knowledge of things scientific. We offer it solely for the pleasure it gives you, and with the hope that it will provide you with many bits of information that will help you to enjoy the stories in this magazine.

If you count 2 points for each correct answer, a total of 60 may be achieved. Of course we don't expect you to score that much, but a mark of 30 points or better indicates you have a good general knowledge of science.

WHAT DO WE MEAN?

Below are several paragraphs, each revolving around a certain subject. Do you know what the subject is?

1. Without it eggs could never hatch, buds would never blossom and trees would always be brown and leafless. It not only develops new life, but also keeps life going. Too much of it would also produce a negative effect. The world as we know it today would be dead.
2. They have a characteristic luster and are malleable and ductile. They also have great mechanical strength and are good conductors of heat and electricity. Chemically they replace the hydrogen of acids, forming salts.
3. They can neither be created nor destroyed, but they can both be changed from one form into another.
4. Minute particles of it make up all matter. Those of the same element have the same weight and those of different elements have different weights. They do not divide in chemical change.
5. Were you to break it in two you would have a scale model of the original. Were you then to break each of the halves in two you would have four parts of the original with each part having the same properties It plays an important part in navigation.

RIGHT OR WRONG?

1. There are times when the rings of Saturn are invisible even through giant telescopes.
2. Refrigerators should be made of materials which are good conductors of heat.
3. Probably the best-known fossil plants are those which grew during the Carboniferous period of the Palaeozoic Era.
4. There is no evidence connecting a magnetic storm with an individual sunspot.
5. The new moon and the full moon rise at 6 P.M.
6. A solid dissolves in a liquid because there is space between the molecules of the liquid.
7. Though the moon is nearest to us of all the heavenly bodies, it is far more difficult to weigh than it is to determine the mass of the planet Neptune.
8. A vacuum bottle is silvered inside to prevent radiation.
9. The winter temperature of an ocean island is lower than that of an inland town of the same latitude.
10. The stars preserve their relative configurations, however much they may alter their positions in the sky from hour to hour.
11. Birds are light because their bones are practically hollow.
12. Warm iron feels hotter than wood of the same temperature because iron is a better conductor of heat.
13. Water vapor, unlike the other gases in the air, is invisible.
14. Water puts out fire because it cools the burning substance.
15. It is not impossible that Venus may have a tiny satellite.

DOUBLE TALK

Under group A are listed several words that may have more than one meaning. Groups B and C give two such meanings—and it's your task to link correctly groups A, B, and C by number.

A	*B*	*C*
(1) Cancer	( ) Sun	( ) Unit of Length
(2) Cell	( ) Cell Body	( ) Space-Filling Medium
(3) Copernicus	( ) Period of Time	( ) Part of Comet
(4) Ether	( ) Measuring Instrument	( ) Element of a Voltaic Battery
(5) Mercury	( ) Physicist	( ) Tumor
(6) Meter	( ) Morphological Unit	( ) Lunar Landmark
(7) Moment	( ) Liquid Compound	( ) Element
(8) Nucleus	( ) Planet	( ) Colloid
(9) Ohm	( ) Constellation	( ) Measure of a Force
(10) Sol	( ) Astronomer	( ) Unit of Electric Resistance

(Answers on page 140)

DISCUSSIONS

AMAZING STORIES will publish in each issue a selection of letters from readers. Everybody is welcome to contribute. Bouquets and brickbats will have an equal chance. Inter-reader correspondence and controversy will be encouraged through this department. Get in with the gang and have your say.

THREE CHEERS

Sirs:

Three cheers for the publishers of AMAZING STORIES and its companion, Fantastic Adventures, which I also like very much.

Favorite stories in recent issues are: "The Living Mist," "The Man Who Knew All The Answers," "The Voyage That Lasted 600 Years," "The Scientific Pioneer Returns," and "The Achilles Heel." Can't think of stories in earlier issues and haven't them at hand to refer to—loaned them all to unemployed fans. Plenty of stories I didn't like. I enjoy most of your departments, especially the Observatory, Scientific Mysteries, Discussions, Meet the Author. Please give us more non-fiction. That "life on the various planets and small bodies" is great stuff, as was the article about future sports and the occasional tiny pieces that you run at the bottom of a story. The one about the first science fiction story was real interesting. Know any more? How about one less story and two more short articles of a page or two apiece?

Thanks again for a great magazine.

Elizabeth Harvey,
1933 Davidson Ave.,
The Bronx, N. Y.

We will have more non-fiction articles in the future. We have on hand a new series by Willy Ley, giving the scientific lowdown on what the other planets really look like.—Ed.

PLEASED TO MEET YOU!

Sirs:

I would like you to meet two of your many fans, a tool-designing engineer and his loving wife.

I try to achieve some accomplishments around my home, but most of the time I am so engrossed in science fiction, my wife calls me a robot; but the situation is similar to Mr. Adam Link and his wife, for she is just about a robot too. She reads the adventures and articles during the day while I have to resort to the evening to catch up with her.

We both agree to most things, and some of them are:

1) Julian S. Krupa's illustration for December 1939 of Henry Gade's story, "Liners of Space," is the best cover yet. 2) Edmond Hamilton is our No. 1 author. 3) Frank R. Paul is our No. 1 artist. 4) Edward E. Smith, PhD. is our No. 1 super author. 5) Adam Link and wife Eve are our No. 1 robot friends. 6) We were disappointed at the loss of our large-size super book Fantastic Adventures.

Glave Spencer & Theona Bunch,
1314 California Avenue,
South Bend, Indiana.

Your editor is indeed glad to know you. But we are wondering just when the children are going to get to read AMAZING STORIES? *And don't tell us it's too soon to worry about that. We are looking forward to a grand future, which is another point we're sure you'll both agree about. —Ed.*

WILCOX'S BEST STORY

Sirs:

In the October issue of AMAZING, I read what I consider the best story Wilcox ever wrote, and certainly one of the best *Amazing Stories* ever published. I will never forget "The Voyage That Lasted 600 Years." The problems which Grimstone encountered are all very logical, and were dealt with in a logical way. Being somewhat of a veteran of Science Fiction, I did not have much trouble swallowing the part at the last about space ships rocketing from Earth to the Robinello Planets in 6 years instead of 600.

I vote "Rescue Into the Past," and "The Day Time Stopped Moving" for second and third place.

In the October Discussions department, Jack Townsend said there ought to be more young fans under 14. I am one of them, being 13.

The cover and inside illustrations were fair. Wilcox's story raised the issue above its usual standard.

I hope to write S-F someday myself, no kiddin'. I've been reading it since 1938.

I'm sure there are plenty of young fans besides myself, and I would like to hear from all of them.

Raymond Washington, Jr.,
Live Oak, Florida.

We have a yarn in this issue by Wilcox, which we think you'll agree is the best "adventure" yarn he has penned yet. Let us know what you think of it.—Ed.

OCTOBER COVER FINE

Sirs:

The October cover is fine, though it looks bad for those two men. It seems that their bullets can't

stop the metal monster, and he's almost on top of them.

The page on the convention is very nice. The photos are fine.

It seems that your Science Quiz isn't very original, as another mag has one too.

You've had some swell "Time" yarns. How about a special "Time Travel" issue?

I read somewhere that the Amazing Stories Quarterly was to have 420 pages. Is this a gag? Glad you're reprinting "Skylark of Space." I've heard so much about this old classic, that it must be good.

How about slick paper?

"Raiders Out of Space" is an excellent yarn, though it is slightly different from the cover. In the story, it says that they didn't shoot at the monster for fear of hitting the girl. Also, the monster didn't rush them, but whirled, after getting the girl.

The back cover is very fine, though the Earthman's mouth is hidden by the space suit.

Harry Schmarje,
318 Stewart Rd.,
Muscatine, Iowa.

Can we help it if other mags imitate us? Our Quiz is generally well liked, and is one of our favorite features. Time yarns are hard to write. And we're doubtful about giving such a big dose of such a pro-and-con subject. Yes, the Quarterly, which carries 17 stories, has over 420 pages. But we are not reprinting the Skylark story. Where'd you get that information? Slick paper? Quit kidding us, Harry.—Ed.

WORTH 20c A MONTH

Sirs:

First time I've ever written to a mag of any kind as a fan or anything else, but your AMAZING STORIES rates the trouble connected with the getting together of the ideas.

First, the September, 1940, issue. "The Synthetic Woman" by Powell was the best by far. All of the others were about even and better than average, I think. Cover by Fuqua was wonderfully carried out but could have been on a better subject.

Next, the October, 1940, issue. The front cover was *excellent*, more of Morey. This brilliantly colored scene attracted my attention and one glance at the stories on the interior was enough to literally drag 20c from my pocket! "The Day Time Stopped Moving"—well, it was colossal.

Back covers are plenty good by me.

Keep up the good work and it's worth 20c a month.

Henry W. Kuehnle, Jr.,
382 Third Street,
Baltimore, Maryland.

P.S.—What does a fella do that would like to try and write a story for AMAZING STORIES in the future? Would you please send information on how a manuscript should be gotten together and a general description on how to ship up a tale?

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30x5.00-20	2.85	1.25
5.25-17	2.90	1.35
28x5.25-18	2.90	1.35
29x5.25-19	2.95	1.35
30x5.25-20	2.98	1.35
31x5.25-21	3.25	1.35
5.50-17	3.35	1.40
28x5.50-18	3.35	1.40
29x5.50-19	3.35	1.45
6.00-17	3.40	1.40
30x5.00-19	3.40	1.40
31x6.00-19	3.40	1.45
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DURING STUDY? TUSH, EDMUND!

Sirs:

A funny thing happened to me today in school, that I think happens to many AMAZING STORIES readers. I was reading a copy of AMAZING STORIES during study when one of the teachers took it away from me and told me to stop reading such *trash*. And to top that off he took it to the Dean's office, and told me that if I wasn't *ashamed* to claim it I could have it back.

Well, that started my blood boiling. After giving him the last piece of my mind, I showed him some questions in the back of the book. And the magazine was *so* trashy that *he* couldn't even answer them correctly.

I think this happens to many of our readers because of the title. When you see "Amazing" in the title you get the idea that the magazine is junk. You see, most people don't believe that you can't tell a magazine by its cover. So if any of our readers hear anyone else calling good old reliable AMAZING STORIES junk, you ask them to find a better science fiction magazine on the market.

I would also like to say that I've been reading your magazine for 2½ years, and haven't found a bad issue in the lot.

Edmund Murman,
136 Shepherd Ave.,
Brooklyn, N. Y.

Naturally, we agree perfectly with your opinion of our magazine, but we don't blame the teacher for taking it away for reading during class. We disapprove unless, Edmund, you could get the teacher to read it aloud to the whole class, as part of the science lesson for the day!—Ed.

SWELLEGANT

Sirs:

Just finished reading your swellegant mag, AMAZING.

This isn't the first time I've finished reading it either. In fact I've a stack of AMAZING STORIES and *Fantastic Adventures* magazines piled high in my room. Lord help the man or beast that disturbs them.

Y'see, pal, (I've come to like you through your discussions) there is nothing I like better, while waiting for a new issue to come out, than to go back and reread some of the back issues. You'd be surprised how much fun, and by golly! sometimes a story you skipped over turns out to be downright entertaining.

I read Discussions first thing. Don't suppose my lil ol' letter will be there, but here's hoping.

What I was going to say is that I haven't any kick about your fine magazine. Oh, sometimes a story or an illustration turns out to be a dud; but gosh! we can't all be perfect, can we? I figure one dud in three months makes an author

turn out fine work the rest of the year. Which is good enough for me.

Gotta sign off for now, pal. See you soon. Bye.

Ruben Larsen,
113 Tappan Street,
Woodstock, Illinois.

P.S. Thanks for the back pictures on the December issue.

We're glad to see you've come to like us through our personal contact via this column. We try to be one of the gang, and apparently we are succeeding. We like you too, and here's your lil ol' letter!—Ed.

CRITICISM

Sirs:

First of all I shall be obliged to use an amount of criticism. I am now referring to your review of the 1940 Science Fiction convention. Your story of it was very puny. All you did was just flit by, only putting in one or two of the important things. Mr. Palmer, in a very nice speech, said that this year in the magazine, Time would get a break, and then he turns right around and tells about authors and such without hardly mentioning the regular fans. You didn't tell enough about the sessions either!

Next I refer to the December AMAZING. The cover by Fuqua was pretty good and Paul's was fair. Which reminds me, there have been innumerable contests for writers, but how about one for artists? I am glad you lengthened the Observatory as it has always provided some excellent information.

"Adam Link Fights a War" was very good, and "Priestess of the Moon" was swell. I really expected "The Invisible"—or rather "The Visible Invisible Man"—to be much better. "Three Wise Men from Space" was rotten! How did it slip by you? "West Point 3000 A.D." was the ending of a pretty good serial. Ah, yes, "The Planet of Errors." Whew! First I made a list of mistakes, then found new ones, then discarded my old ones, then thought they were right. Well, it ended up with my going out to a punk movie. Mr. Palmer's speech, by the way, didn't bore me. I think I'd better sign off.

Morton Handler.

P.S. I am thirteen years old, and that probably explains why the mistakes in everything have occurred.

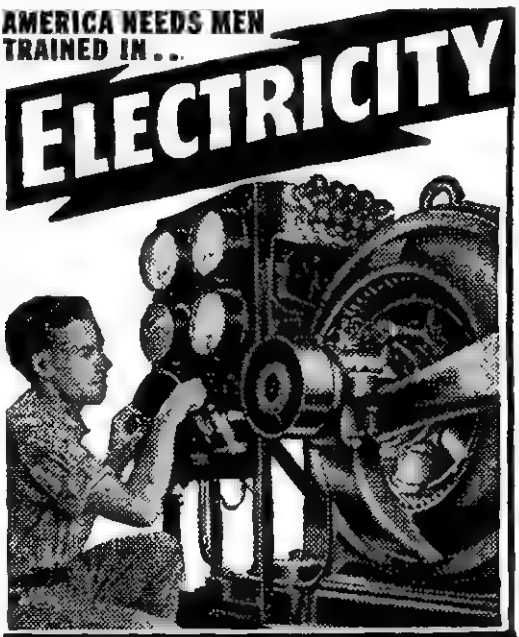
Erle Korshak has promised us some pictures of the convention, and some data on the official viewpoint of it. We gave you only our picture of it, as we saw it. How would you have a contest for artists? There are so few. We are glad you liked Cummings, because he's coming back soon again with another swell yarn.—Ed.

BEST—BUT NOT GOOD ENOUGH!

Sirs:

I have been an AMAZING STORIES fan for six or seven years but this is my first letter. You have a great magazine; they don't come any better.

Your fall issue was a fine idea but it would



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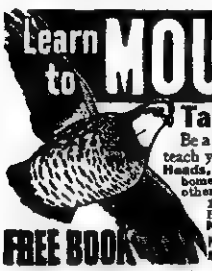

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have been still better had you selected four or five "best stories" of the year and reprinted them. Even at a higher price it would have been demanded by collectors.

Now we come to the November issue. Fuqua has done a good job on the front. Paul's back cover is as usual very good.

I have rated the stories in this manner: (1) The Scientific Pioneer Returns. Give us more of these characters. Bond has something there. (2) Treasure Trove in Time—a climax such as only O'Brien can give us. (3) Revolt on the Tenth World –good story but it could have been much better with such a good plot. (4) The Achilles Heel—very good. Gallun is improving. (5) Hell Ship of Space—I won't say much—why? The departments were all good but they can still improve. Your story illustrations need much improvement.

Levi S. Hilleary,
R. R. 2, Baltimore Pike,
Cumberland, Md.

We are glad to know you think we are a great magazine. And we won't say anything about that old Sanskrit proverb, give a man a finger and he wants the whole hand, because that's exactly what we are going to give you; all the improvement you want!—Ed.

SPORTS OF THE FUTURE

Sirs:

Recently a friend pointed out to me an article in your September issue titled "Sports of the Future" by Leonard Gipson. Although I would hardly be tempted to comment on your otherwise excellent magazine, Mr. Gipson's conclusions are *so* amazing that I have been inclined to write and try to present the other side of the story.

The article in question is right up my alley, having competed in track meets for several years and written about them for several more.

Let me say at the start that I do not question the facts involved (although there is no sech animal as a 16-foot shot put), but merely the conclusions drawn from them.

It appears to me that Mr. Gipson infers that the startling and wholesale breaking of record during the past 40 years is due to improvement of the breed. This is against all the best evidence and opinion of expert track coaches. The simple truth of the matter is that these advances have been made because of better conditions.

Young athletes, from their very birth, are living more hygienic lives (this Mr. Gipson points out) and have the benefit of much improved coaching and actually better conditions of operation when competing in their respective sports. (This Mr. Gipson apparently denies.)

Mr. Gipson states, for example, that (speaking of the Penn Relays) "the same meet has been held in the same stadium for decades." But not, let me add, on the same track. The track surface has constantly been improved, even from year to year. If heavy rains precede an important meet at Franklin Field today, huge dryers put the track in excellent condition even a few hours after the storm.

There is absolutely no reason to believe that some of the great stars of the turn of the century might not equal or even better the performances of our present-day athletes under these conditions. Yet Mr. Gipson says: "The reason for this astounding improvement is the stimulus of keener competition, greater athletic opportunities . . . and the universal physical improvement of the human race." The author completely ignores the two most important reasons; namely, better conditions, as I have already pointed out; and also the vastly greater number of boys competing in sports at the present time. It must be obvious that the chances of finding a record-breaker among the thousands who compete today are much greater than finding one among the hundreds who competed 40 years ago.

Mr. Gipson quotes the records to prove his points. Let me try to turn the figures against him. Let us consider one event, the pole vault in which we see an approximate improvement of 20 per cent between 1900 and 1940. Can anyone be so naive to suppose that the human race can improve by 20 per cent in a generation? The author has sought to find an unusual explanation and overlooked the obvious.

And again, Mr. Gipson guesses at the probable records in the year of 2000, each shows a great improvement over the current marks. (As a matter of fact 230 feet in the discus throw is beyond any stretch of the imagination.) The inference is, I suppose, that track records will continue to improve so that the standards of the year 3000 will be so much better, and those of 4000 still better, and so on. This would bring us to the ridiculous conclusion that eventually the record for the 100-yard dash, let us say, would be :00 flat. Or perhaps, Mr. Gipson means that the improvements are to be asymptotic in which case they will approach, but never reach, some set standard. If this be his intention then his figures are, indeed, awkward since his estimates for the year 2000 show no such trend.

Before I finish up, let me point out a few more conclusions that I have drawn. One is that the mechanical departments of racing have improved. By this I mean that the watches used today are vastly better than those in use years ago, and may account in some measure for the phenomenal improvement in foot racing, at least the *apparent* improvement.

Another point is that track and field sports today are free from much of the skullduggery that abounded a few years ago. In talks that I have had with men who used to run in those days, I have been amazed by some of the tricks which were used to win races, set records and slow up opponents—all, it seems, in order to win money bet on the races. Furthermore, the records listed for 1900 and thereabouts are not necessarily accurate. If one examines—as I have done—the records of that time, all sorts of cases come to light where men were credited with startling times and distances in their specialties. All one

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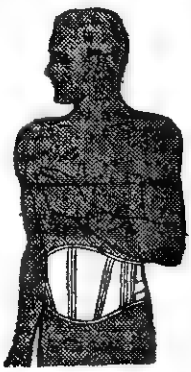

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has to do is see the established Australian Professional records to appreciate this. Donaldson is credited with 9⅗ seconds for the 100-yard dash in 1910, for example. I recall further, having examined a book of ancient vintage in which a Japanese runner is credited with running a 100-yard dash in eight and some odd tenths away back before the turn of the century. This, of course, never found the record books, but who am I to say that it was never done.

In conclusion let me say that I can hardly agree with Mr. Gipson's remarks about team sports. Surely the trend today is toward much greater, rather than less, support in this direction. As for the statement that there is too much wasted time in baseball, certainly weight-lifting is not the answer as the author seems to say.

If you should see fit to use any part of this in your columns you have my permission. However, I would prefer that my name *not* be mentioned.

This vigorous answer to Mr. Gipson's article requires no comment by your editor, we believe. But maybe Mr. Gipson might like to say something?—Ed.

MORE SCIENTIFIC MACHINES

Sirs:

I have been reading this magazine since March, 1940, and would like to give my opinion of it. The covers are masterpieces, especially the back covers, but why not a few more scientific machines rather than deformed, nonsensical monstrosities, which are absolutely unscientific? Except for these features the magazine is tops.

I started reading this magazine because my father and uncle used to read it years ago, and I would like to ask if it is possible to return such stories as "Into the Green Prism" and "Worlds Within Worlds."

I rate the stories in the November issue as follows: (a) "The Scientific Pioneer Returns," (b) "Revolt on the Tenth World," (c) "Hell Ship of Space."

Frank R. Green,
Congresbary P. O.,
Alberta, Canada.

Next month we are presenting a space ship cover, illustrating a scene from Don Wilcox's great space yarn, "Battering Rams of Space," a sequel to "Slave Raiders of Mercury."—Ed.

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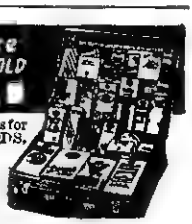

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QUIZ ANSWERS

(Quiz on page 131)

RIGHT OR WRONG?

1. True. 2. False. 3. True. 4. False. 5. False. The new moon rises at 6 A.M., while the full moon rises at 6 P.M. 6. True. 7. True. 8. True. 9. False. 10. True. 11. True. 12. True. 13. False. 14. True. 15. True. Venus' great brilliancy and nearness to the sun would make the discovery of such a body extremely difficult.

DOUBLE TALK

Group B: 10, 8, 7, 6, 9, 2, 4, 5, 1, 3.
Group C: 6, 4, 8, 2, 1, 3, 5, 10, 7, 9.

WHAT DO WE MEAN?

1. Heat from the sun.
2. Metals.
3. Energy and matter.
4. Atoms.
5. A magnet.

CORRESPONDENCE CORNER

Harry Schmarje, 318 Stewart Rd., Muscatine, Ia., wants pen pals, either sex, ages 14 to 16 . . . Al Narkis, 4353 S. Talman Ave., Chicago, Ill., would like to correspond with young ladies between 15 and 18 who are interested in sports, photography, science, collecting stamps, and drawing; will answer promptly . . . Katherine Baum, 1243 Juniata St., N.S., Pittsburgh, Pa., has for sale rare issues of magazines which will go to the highest bidder . . . J. A. Morton, 20 Done St., Arncliffe, Sydney, Australia, wishes to contact pen pals in the United States or Canada; 14 yrs. of age, and interested in things concerning the universe . . . Eva Schaeffer, 2208 Nueces St., Austin, Tex., a freshman at the University of Texas, would like to hear from science fiction fans at the university, especially girls . . . Chester Hoey, 301 6th Ave., Brooklyn, N. Y., would like to correspond with girls around 25 yrs. of age . . . Hannah Bryant, 27 Elizabeth St., Redfern Sydney, N.S.W., Australia.

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Australia, wants correspondents any age, in any part of the world. . . . Iris M. Usher, Benarkin, B. U. Line, Queensland, Australia, 26 yrs. of age, would like long friendly letters from anyone, any age, in the United States or Canada; interested in sports, gardening, exchanging snapshots. . . . Harry Jenkins, 2409 Santee Ave., Columbia, S. C., 16 yrs. of age, wants correspondents between 15 and 20; all letters will be answered immediately. . . . Morton Kaye, 1217 Higa Terrace, Union, N. J., wishes to get in touch with science fiction and AMAZING STORIES readers in Union; telephone Un. 2-4097. . . . M. Korshak, 5555 Hyde Park Blvd., Chicago, Ill., wishes all those interested to send their name and address for a free copy of a science fiction catalogue. . . . Philip Tobenkin, 3348 Kempton Ave., Oakland, Calif., has for sale a fine collection of science fiction magazines which will go to the highest bidder. . . . Jack Downes, "Woodlands," Broula; Via Cowra, New South Wales, Australia, would like pen pals who are interested in exchanging stamps and magazines; guarantees a reply to each letter. . . . Brune DeRochi, 3627 Virginia, St. Louis, Mo., is desirous of receiving instructions and data to build a telescope. . . . N. G. Martin, 1110 Highland Ave., Bristol, Va., will sell many second-hand science fiction and other magazines for 5c each; state copies desired. . . . N. Goring, Chatham Heights, Fredericksburg, Va., would like to correspond with pen pals in China, Alaska and Canada, and collect oddities and coins.

SCIENTIFIC MYSTERIES
The Pyramid of Gizeh
(Continued from page 71)

amazing is the absolute mathematical accuracy of the Sacred Elbow as a unit of measurement. Ten million Sacred Elbows equal the exact polar radius of the earth, accurate to within 0.003937 of an inch. A hundred million Sacred Inches is the exact length of the arc described by the earth along its orbit in 24 hours.

Every dimension of the pyramid is based on the four simple numbers 2, 3, 5, and 7 or their multiples. The area of every face of the Pyramid is equal to the square of the height. The sum of the diagonals of the base is 25,800 Sacred Inches or almost exactly the period of precession of the point Gamma of the spring equinox.

The weight of the pyramid is exactly one thousand billionth the weight of the earth. Multiplying the average density of stone in the pyramid by its total volume we get a figure in cubic elbows that begins with the number 552. And 5.52 is the density of the earth.

Several dimensions of the Great Pyramid employ the figure *pi* or 3.1416. Yet it was not until the fifteenth century that our mathematicians succeeded in working out the value of *pi*.

The length of the inner antechamber in Sacred

(Concluded on next page)

TELEVISION GOES TO U. S. WAR MANEUVERS

Once again military science strikes a balance between attack and defense! For the first time in our military history, commanders saw as well as heard the reports of scattered scouts during the recent U. S. Army maneuvers! Read all about the startling results of this first military television demonstration; how such visual means of communication can play an important role in the defense of our nation! By all means, don't miss this timely and up-to-the-minute article . . . one of the many great features on radio you'll thoroughly enjoy in the

RADIO NEWS

DECEMBER ISSUE—Now On Sale At All Newsstands!

The Siege of London

Since the Luftwaffe mission in the bombardment of England began August 8, what targets have the Nazi raiders actually hit? Why has Hermann Goering failed to gain control of the air? Just how powerful is the Royal Air Force? Did Hitler underestimate British aircraft production? How many pilots has England in reserve? These are just a few of the important questions of the all-out air war answered by FLYING and POPULAR AVIATION'S war correspondent, Leonard Engel. Don't miss this authoritative and exclusive article of the first aerial siege in history, beginning on page 10 of the big

DECEMBER ISSUE

FLYING AND POPULAR AVIATION

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Inches multiplied by *pi* gives 365.242, which is within 0.001 the exact length of the tropical year.

The base of the pyramid is 9131.416 Sacred Inches which is the exact number of days contained in 25 years and makes the sidereal year 365.25664+ days, which is within 30 seconds of the exact length of the year as worked out by our most advanced modern science. Incidentally, the length of the base in inches is almost exactly 1/480th of one equatorial degree. Using this figure to estimate the length of earth's equator, we get a distance of 24903.86181 miles or only 1.5 miles greater than the measurement decided upon by modern science.

Dividing the pyramidal equator distance by *pi* gives the diameter of the earth at 7927.1 miles—only half a mile longer than the estimate calculated by Sir James Jeans, our modern astronomer.

These are only a scanty few of the striking and almost unbelievable secrets so far divulged by the Great Pyramid of Gizeh. Beyond a doubt, a vast number of other secrets are still hidden within its brooding mass, awaiting discovery. For centuries, some of the greatest minds of science have worked on the mysteries and the sum total of amazing discoveries so far is enough to fill volumes.

Not only mathematical secrets but the whole intimate story of the human race is believed to be revealed by the pyramid. While there is no space here in this article to go into Pyramidal Prophecy, it is enough to say that the discoveries made to date coincide exactly with all the great events in history.

But the greatest mystery of all—who built the Great Pyramid—may never be solved. The deeper one goes into the study, the less possible it seems that either the Egyptians or the pre-Egyptians possessed the knowledge to build such a monument to science.

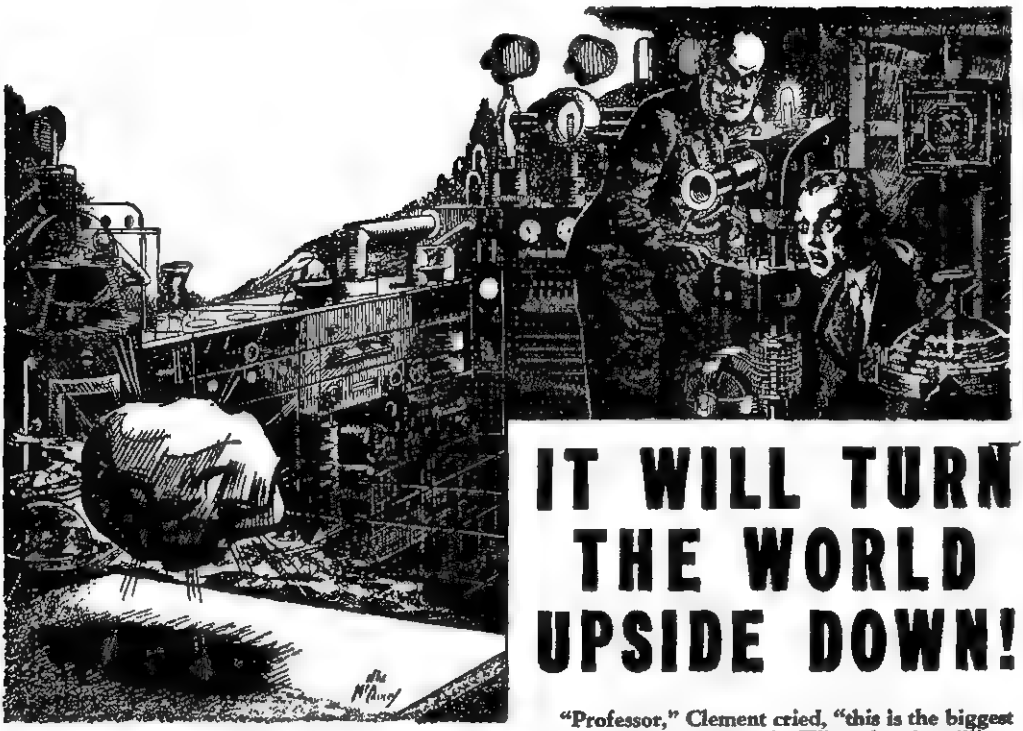
More and more, thinking people are turning to the greater question . . .

Was there, at some time in Earth's shadowy past, a race of inhabitants whose culture was even greater than our own today? There is much more evidence than just the Great Pyramid to back this belief. The whole world is full of marvels that can only be logically explained on a basis of some ancient science beyond even modern comprehension.

If such a race existed, what became of them? It is hard to believe that people so advanced and learned would let themselves be destroyed utterly by the Ice Age and the Deluge.

It is easier to believe that through their vast science, this super-race saw what cataclysms were to strike the earth and travelled on to some distant planet where conditions were more favorable for their living and scientific attainments.

And who knows but what, some day in the not too distant future, these supermen may come back for a visit to their old home planet, to marvel at us and our primitive ways of life?



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"Professor," Clement cried, "this is the biggest thing you've ever done! Why, there's millions in this. The burdens of the world will be lifted from its shoulders. A hundred inventions will grow out of this one discovery! We can make anti-gravity machines and sell them by the thousands. This is the most sensational thing since the gasoline engine!"

Professor Stillwell beamed. He caught a portion of Clement's enthusiasm and patted his machine affectionately. "This is only a very crude affair, Clement," he protested. "Just wait until I show you my perfected model. It will work on anything!" Professor Stillwell never spoke truer words!

Read how, two weeks later, this super anti-gravity machine ran wild in the streets of Cincinnati . . . how Professor Stillwell became entangled in a web of the most exciting adventure of his screwball career. Don't fail to read *"The Stillwell Degravitator"* . . . a thrilling story by Charles R. Tanner in the February issue of the world's most famous science fiction magazine.

6 GREAT STORIES IN THE FEBRUARY ISSUE

★ **ADAM LINK IN THE PAST—by Eando Binder.** Turning to ancient mythology, Adam Link was amazed to learn of the Norse god, Thor, and his incredible feats. "Thor could only have been a robot!" exclaimed Adam, and set out in a time-travel ship to find the legendary god!

★ **THE LAST ANALYSIS—by John York Cabot.** Forbes and Barton had it at last . . . the most sensational discovery science had ever made! A machine that could predict the future crimes of all men! And then they analyzed themselves . . . and got an amazing result!

★ **BATTERING RAMS OF SPACE—by Don Wilcox.** Once more Lester Allison and June O'Neill return . . . by popular demand! These favorite characters of a favorite author find themselves involved in an interplanetary war that threatens the destruction of whole continents on Earth!

★ **THE ACCIDENTAL MURDERS—by Robert Moore Williams.** Sometimes a man dies, because of so trivial a thing as a broken shoestring which delays him long enough to miss his usual train . . . and thereby becomes involved in a wreck! But what if those broken shoestrings were not accidents?

★ **LIGHTS—by Gordon A. Giles.** On two worlds the dream of interplanetary travel was coming true. And on two planets the obstacle was . . . money! But even financial men could be convinced, if science could prove it worthwhile. But there was war to consider . . .!!

AMAZING STORIES

ON SALE AT ALL NEWSSTANDS DECEMBER 10

A CITY ON VENUS

BY HENRY GADE

Our back cover depicts Frank R. Paul's vivid painting of a Venusian city and here is the author's story of that city

HOW would you like to see a city on Venus, the watery world? You would? Then step right up and take a seat in the spaceship *Imagination*, which is ready to take off on a sight-seeing tour to the world of the goddess of romance. Our ship is powered with a fuel called scientific fact, however, and remember that whatever you see, won't be entirely a dream. It could, logically, be as we shall try to show it to you.

Nearing Venus, we find that the planet's surface isn't visible. Venus is surrounded by a perpetual cloud blanket, many miles thick. The sun never shines on its true surface.

Into the clouds we plunge, rockets roaring in the heavy atmosphere. Then, abruptly, after we had begun to fear the clouds extended all the way to the ground, we burst into open air.

And what a weird world meets our eyes! It is just like on Earth, after an afternoon shower, when all is bathed in that weirdly beautiful yellow light of the sun struggling to penetrate the heavy rain clouds. But where can there be cities, for far below us, rolling in glassy swells, is an endless sea.

But swooping down near the surface, we skim along, ever searching the horizon. Finally, after hours, we see something looming up out of the haze. It is land!

But what land. It is a raw, rocky mountain range, rising out of the sea, sheer and brutal, and somehow *new*. There is no air of the ages about this expanse of rock. But clustering around its base is something that reminds us of our south seas, somehow. It is formations of coral reefs, exposed now to the air by the upheaval of the young planet which raised the first raw mountain range not so many thousands of years ago. And on the coral reefs is the first vegetation we have seen.

Now we see that the smooth sea is dotted by floating islands composed of plant life and marine animals. Some of them are quite large. Here we may find a city.

Further down the coast of this lone continent we find larger islands, some of them now permanently anchored to the shore. And as we near them through the mist, we find our city.

But what a city. It is a simple little thing of scattered dwellings roofed by huge fungus caps. All about the islands, and even perched up on the rugged mountainside, are the prosaic, homey-looking little dwellings with their rounded roofs.

They are brilliantly colored, in spite of the lack of sunlight. The clouds do not shield the important rays of the sun, much nearer to this world than to ours. All the brilliant reds and yellows and whites of Earth fungus are here.

We circle slowly over the city. It seems to be an idylic world, at first, but then we see the first citizens of this strange city. They sweep toward us perched on the backs of great pterodactyls. They are quasi-amphibian creatures and apparently are more at home in water than on land, or in their city.

Going lower, after we get over our amazement at this unusual form of aerial transportation, we see yet another form of travel, about the waterways of this floating city. Groups of citizens ride the lagoons atop the backs of great amphibian reptiles of gargantuan proportions. This indeed is the oddest ferry we have ever seen. And no fare is required!

Not only do these reptiles carry passengers, but also freight. They obey their masters, who somehow impress us with their common and not too distant origin, which may explain how it is all done.

We see other animals performing duties. For instance, trained pterodactyls bring captured animals from the mountain heights to their masters for food. But most of the food is harvested right in the water, or on the smaller islands that float past. Vegetable foods, loaded copiously on the amphibian ferries and stored in the fungus-roofed houses.

The islands themselves, and the island-cities, are a riot of beautiful vegetation almost tropical in nature. It is very warm, and no Venusian wears clothes. All in all, this City on Venus seems to be a placid place. Its inhabitants seem to work hard for food, wage no wars, and cheerfully construct their growing empire which may one day produce the giant cities of earth, when more land has appeared. The city of Venus is youthful!

Here's the most Amazing Scientific Experiment ever performed!

"Sure!" snapped Roger Cass, "I'll go through the experiment with you, if that's what you want. But it's the last one! After that you pay me off and I get out of here! Understand? I'm getting tired of this damned nonsense!"

Dr. Kelton's young assistant blew up completely. And that (although Cass didn't know it) was exactly what the crafty scientist expected him to do!

Minutes later Roger Cass was sitting across the table from the aged doctor. A silver helmet lined with a mesh of tiny wires and filaments was on the head of each. Near the table a bank of tubes in a control board was warming up. Two small wires led from the board to the switch in the hands of Dr. Kelton.

And then, quite suddenly, the experiment began . . . yes, the most amazing scientific feat ever performed! What happened to Roger Cass?

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